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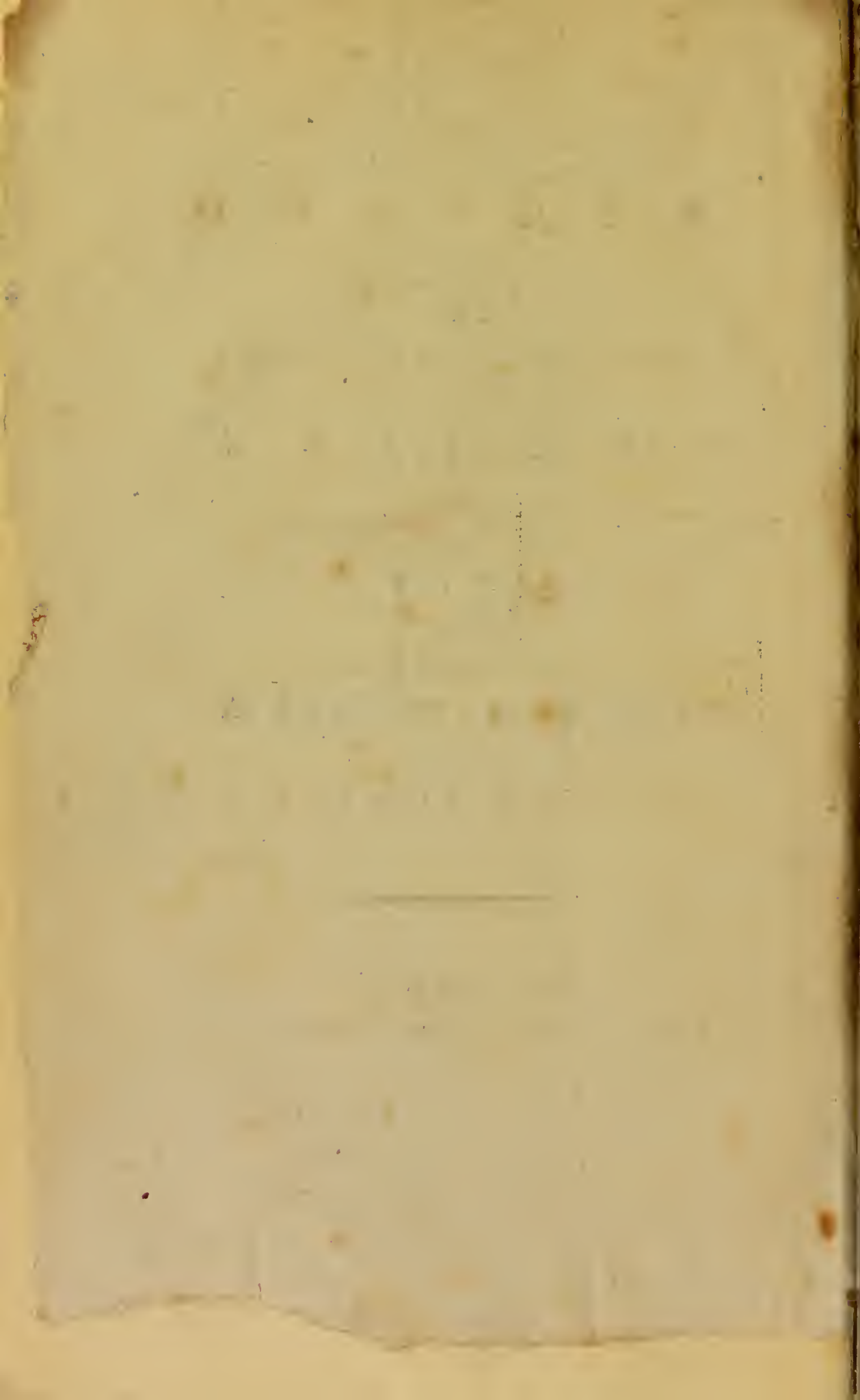


AN

E N Q U I R Y

INTO THE

ORIGIN OF THE GOUT.



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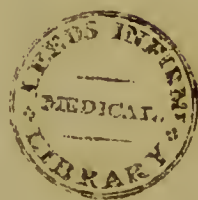
WHEREIN

Its various SYMPTOMS and APPEARANCES are
traced to their CAUSE;

AND

A safe and certain MODE of REMEDYING it
proposed.

By JOHN SCOT, M. D.



LONDON,

Printed for T. BECKET, Corner of the Adelphi, Strand.

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INTRODUCTION.

FROM the earliest accounts of the Gout, down to the present period, it has ever been treated and spoken of as a disease entirely *sui generis*, singular in every respect, and unclassable with any of the other disorders incident to the human body : these opinions have given unbounded scope to imagination, in the search after the cause and the cure of the Gout ; and, probably, have been the true reason why that disease, of all others, still continues to be the *opprobrium medicinæ*, and is at this day considered by the Public, as well as the Faculty, as incomprehensible in its nature, and unmanageable in its effects. This being the situation of the matter, every man who thinks he can contribute to remove the thick dark-

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ness that furrounds the subject, may certainly hope to be listened to with attention, and judged of with candour, and to receive so much applause, as each attempt to diminish the number of human afflictions may seem to deserve. Such are the considerations, that have encouraged me to offer to the Public the following Treatise, on the rationale and method of treating the Gout, and other disorders of the nervous system ; which else, on account of the novelty of most of the opinions contained in it, I should have confined within the small circle of my own society and conversation.

C H A P.

C H A P. I.

Of the different kinds of Gout.

ALTHOUGH, in every case, I shall consider the Gout as a disorder of the nerves, yet, as it varies much in its symptoms and appearances, according to the place and circumstances of the attack, it may be divided into five different states or conditions, viz. *irregular, imperfect, regular and perfect, misplaced and retrocedent.*

The Gout is termed *unformed, irregular, and wandering*, when, without fixing on any part of the extremities, it excites in the body a variety of troublesome complaints, undistinguishable from those that are characterised by the general name of nervous .

When suddenly in the night, and while the patient is asleep, without

any previous warning or disorder in the gastric region, the Gout attacks some joint of the extremities, producing a lameness, and a puffy swelling of the integuments, but without pain or inflammation, the patient himself knowing nothing of the matter until the morning, when he discovers his inability to use the member affected; this may justly be deemed an *imperfect Gout*, not unlike the tumefactions of the cuticular and adipose membranes, to which hypochondriac and hysterical people are frequently liable in various parts of the body.

When, after several days inappetency, indigestion, flatulency, and other marks of disorder in the *primæ viæ*, the patient is suddenly seized in his sleep with an excruciating pain in some joint of the extremities, the ball of the great toe, for example, seemingly arising from a spasmodic contraction

traction of the tendons, and tendinous ligaments and membranes of the part affected; which, after uninterrupted torture for the space of twenty-four hours, beginning to abate of its severity, the patient gets a little sleep, and awakes pretty free from pain, but perceives that the part affected is considerably swelled, with an erysipelatous inflammation diffused all over it; these symptoms and appearances, accompanied with a considerable degree of fever and thirst, and a copious red sediment in the urine, are the distinguishing marks of a complete paroxysm of *perfect, regular Gout*. I particularly mention the appearance of the urine, because the red sediment is a certain criterion of the true inflamed, regular Gout, and never accompanies a spurious, irregular, or imperfect attack.

The Gout is called *misplaced*, when, instead of the joints, the paroxysm vents itself on the face, in the form

of an erysipelas; or on the throat, with all the symptoms of a painful and dangerous quinsy; or on any other part of the body, not a joint. This kind of Gout, though misplaced, is regular and genuine, and is accompanied with the characteristic appearance of a red sediment in the urine.

When, after being fairly and completely formed, with pain and inflammation, in the extremities, the Gout, by some accident, forsakes that station, and fixes elsewhere in the trunk, the head, or internal parts of the body; in that case it is named *retrocedent*. And when the retrocedent Gout fixes in the stomach, the brain, or other important vital part, the patient's danger becomes extreme, chiefly on account of the erysipelatous inflammation which accompanies the spasm: but a primary attack in the stomach from an irregular Gout, is seldom very dangerous, if properly managed;
being

being commonly no more than a spasm, unattended with any inflammation; and more readily cured by cordials, than by bleeding, which rather lengthens the attack.

C H A P. II.

*Nervous complaints not distinguishable from irregular, wandering Gout.—
An accurate detail of hypochondriac, hysterical, and other nervous symptoms.*

I Have said that the symptoms of irregular Gout are indistinguishable from such as are characterised by the general name of nervous; and that the reader may the better judge of the truth of that assertion, I beg leave to recommend the perusal of the following accurate detail of such symptoms as are deemed hypochondriac, hysterical, and nervous, and to compare them

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with another and equally exact account of those symptoms that are imputed to latent, irregular, unformed, and wandering Gout ; both details, as they are given by the late Dr. Whytt, Professor of Medicine in the University of Edinburgh, in his celebrated Treatise on Nervous Disorder, &c. And if it shall appear that the chronic and unformed or wandering Gout, is so exactly similar to nervous, hypochondriac, and hysterical complaints, that no distinction can be made, either in their cause or in the method of treating them, it will be fair to conclude, the regular Gout having the same origin as the irregular, that both regular and irregular Gout ought to be placed in the class of diseases arising from a morbid state of the nervous system.

“ I shall not, says the learned Professor, pretend to exhibit a complete list of all the morbid symptoms which have commonly been reckoned of the
the

“ the nervous, hypochondriac, or hy-
 “ steric kind, but shall content my-
 “ self with mentioning the following,
 “ as being the most common and re-
 “ markable; wind in the stomach and
 “ intestines, heart-burning, sour belch-
 “ ings, squeamishness, and vomiting
 “ of watery stuff; tough phlegm, or
 “ a black liquor like the grounds of
 “ coffee; want of appetite and indi-
 “ gestion, or uncommon craving for
 “ food, and indigestion or debility,
 “ faintness and sense of great empti-
 “ ness about the stomach when hun-
 “ gry; a strong desire for rare and
 “ and uncommon sorts of food, or
 “ for things that can afford no nou-
 “ rishment; a visible swelling or in-
 “ flation of the stomach especially af-
 “ ter eating; sometimes with cramps
 “ in that viscus, an oppression about
 “ the præcordia; an uneasy though
 “ not painful sensation about the sto-
 “ mach, attended with low spirits,
 “ anxiety,

“ anxiety, and sometimes great timi-
 “ dity; strong pulsations within the
 “ belly; spasms in the bowels and
 “ distensions of several portions of
 “ them; violent colic pains; a rumb-
 “ ling noise from wind passing
 “ through the intestines; the body
 “ sometimes too lax, oftner bound;
 “ pains in the back and belly, re-
 “ sembling those of the nephritic
 “ kind; a sense of irritation and heat
 “ in the neck of the bladder and ure-
 “ thra, with a frequent desire to
 “ make water; a great discharge of
 “ limpid urine, at other times a fre-
 “ quent spitting. Sudden flushes of
 “ heat over the whole body; shiver-
 “ ings, a sense of cold in certain parts,
 “ as if water was poured on them;
 “ at other times an unusual glow;
 “ flying pains in the arms and limbs;
 “ a troublesome pain in the back and
 “ between the shoulders; pains, at-
 “ tended with a hot sensation, shifting
 “ often

“ often from the sides or back to the
 “ interior parts of the abdomen ;
 “ cramps, or convulsive motions of the
 “ muscles, or of a few of their fibres ;
 “ sudden startings of the legs and
 “ arms ; almost constant involuntary
 “ motions of the muscles of the neck
 “ and head, or arms and legs ; a gene-
 “ ral convulsion, affecting at once the
 “ stomach, bowels, throat, legs, arms,
 “ and indeed almost the whole mem-
 “ bers of the body, in which the pa-
 “ tient struggles as in a violent epilep-
 “ tic fit ; long faintings, in some cases
 “ following one another after short
 “ intervals ; palpitations or trembling
 “ of the heart ; the pulse very vari-
 “ able, frequently natural ; some-
 “ times uncommonly slow, at other
 “ times quick ; oftener small than full,
 “ and on certain occasions, irregular
 “ and intermitting, a dry cough, with
 “ difficulty of breathing, with a con-
 “ striction of the lungs, sometimes re-
 “ turning

“ turning periodically; yawning, the
 “ hiccup, frequent sighings, and a
 “ sense of suffocation as if from a ball
 “ or lump in the throat, fits of cry-
 “ ing and convulsive laughing; al-
 “ though in the day time the patients
 “ are more generally pretty cool, and
 “ the pulse sometimes slower than na-
 “ tural; yet in the night, especially
 “ in time of sleep, hot flushings often
 “ spread over almost the whole body;
 “ the pulse becomes quicker and
 “ stronger, and a faintness or some
 “ degree of sickness at the stomach is
 “ felt.

“ A giddiness, especially after rising
 “ up hastily; pains in the head some-
 “ times returning periodically; a vio-
 “ lent pain in a small part of the head,
 “ not larger than a shilling, as if a
 “ nail was driven into it; ringing in
 “ the ears; a dimness of sight and ap-
 “ pearance of a thick mist, without
 “ any visible fault of the eyes. Ob-
 jects

“ jects are sometimes seen double,
 “ and unusual smells are perceived;
 “ obstinate watchings, attended some-
 “ times with an uneasiness which is
 “ not to be described, but which is
 “ lessened by getting out of bed; dis-
 “ turbed sleep; frightful dreams;
 “ the night mare; sometimes a drow-
 “ siness and too great inclination to
 “ sleep; fear, peevishness, sadness,
 “ despair; at other times high-spirits;
 “ wandering thoughts, impaired me-
 “ mory, ridiculous fancies; strange
 “ persuasions of their labouring un-
 “ der diseases of which they are quite
 “ free, and imagining their complaints
 “ to be as dangerous as they find them
 “ troublesome; they are often angry
 “ with those who would convince them
 “ of their mistake.

“ Patients, after having been long
 “ afflicted with many of these symp-
 “ toms (for all of them never hap-
 “ pened to any one person), sometimes
 fall

“ fall into melancholy madness, the
“ black jaundice, a dropfy, tympany
“ phthifis pulmonalis, palsy, apo-
“ plexy, or some other fatal diftem-
“ per.”

C H A P III.

*An accurate detail of the fymptoms im-
puted to irregular wandering Gout.*

THE fame author's account of the
fymptoms, and diforders occa-
fioned by the unformed, irregular
Gout, is literally as follows.

“ This morbid caufe in the blood,
“ inftead of being depofited on the
“ aponeurofes, tendons, ligaments
“ and membranes of the feet, hands,
“ or other joints, falls upon different
“ parts of the body, and produces
“ fymptoms almoft as different as are
“ the parts which it attacks; fuch for
“ inftance are the flying pains, fpaf-
“ modic

“ modic contractions, and sudden fen-
 “ sations of heat and cold, in the
 “ muscles and exterior parts of the
 “ body. A want of appetite and too
 “ great craving and faintness; a nau-
 “ sea or vomiting, flatulent swellings,
 “ borborygmi, watching, low spirits,
 “ cramps, convulsions, and violent
 “ pains in the stomach and bowels.
 “ An increased secretion of saliva, from
 “ an irritation of the vessels of the
 “ salivary glands; the globus hyste-
 “ ricus in the gullet; a spasmodic
 “ asthma in the lungs; palpitations,
 “ and irregular motions in the heart;
 “ an excessive flow of pale urine, or
 “ sometimes nephritic pains in the
 “ kidneys; a hemicrania, the calvus
 “ hystericus, or shooting pains in the
 “ head. Besides these, I have seen
 “ many other symptoms occasioned by
 “ an imperfect or an irregular Gout;
 “ such as a delirium or mania; an in-
 “ flammation in one of the tonsils; a
 “ trouble-

“ troublesome dysuria ; a violent itch-
 “ ing between the toes ; a severe pain
 “ about the cartilago ensiformis, re-
 “ turning twice or thrice a day, ef-
 “ pecially upon any strong affection
 “ of the mind, or effort of the body,
 “ and sometimes attended with a pain-
 “ ful sensation in the middle of each
 “ arm ; a sense of burning heat over
 “ the whole surface of the body, ex-
 “ cept the legs, while in the mean
 “ time the skin was scarcely sensibly
 “ hotter than in a state of health, and
 “ the pulse was under eighty in a mi-
 “ nute. In one patient I met with a
 “ slight, but frequent returning go-
 “ norrhæa, from a Gouty humor fall-
 “ ing in the vessels of the urethra ; and
 “ in another, an uneasy itching of the
 “ scrotum. I have seen three cases of
 “ a sharp pain in the testicles, from
 “ the same cause. In one of these
 “ there was a considerable swelling
 “ along with the pain, both which
 “ went

“ went off upon the Gout coming into
 “ both the feet.

“ All this is confirmed by observ-
 “ ing, that persons, who have been
 “ but little troubled before with those
 “ symptoms, commonly called nerv-
 “ ous, upon the rheumatic, or rather
 “ gouty pains, leaving their feet, hands,
 “ or loins, have been seized with an
 “ irregular intermitting pulse, giddi-
 “ ness, faintness, difficulty in breath-
 “ ing, nausea, vomiting, flatulency in
 “ the stomach and bowels, depression
 “ of spirits, and other symptoms of
 “ the like kind.

“ Such complaints, if the patient
 “ has never had the Gout, are gene-
 “ rally called nervous; but if he has
 “ been subject to the Gout, they are
 “ imputed to the arthritic matter leav-
 “ ing the extremities, and fixing on
 “ the head, or viscera of the thorax or
 “ belly.”

C H A P IV.

Of the existence of a gouty matter in the juices—the arguments in favour of it insufficient.

FROM the manner in which the Professor concludes his account, it is evident that, with all his accuracy and penetration, he could discover no criterion, by which nervous and hypochondriac complaints might be distinguished from irregular Gout. And the truth is, they are not to be distinguished; they are of the same family, differing only as one nervous symptom may differ from another nervous symptom, or as the difference of constitution, and other circumstances, may create a variation in the appearance of the same symptom in different persons.

The ancient opinion, and the general one of this day, is, that all
gouty

gouty symptoms, whether acute or chronic, regular or irregular, are excited by the irritation of a certain acrimonious matter in the juices, which matter is supposed to be generated by intemperance, or inherited from parents; and this acrimonious humour being of a specific nature, is distinguished from every other acrimony, of which there are supposed to be a variety, by the name of *Materies Arthritica*. And this arthritic matter, when accumulated to a certain point, is supposed to discharge itself on some joint, and thus to create a paroxysm of Gout.

The chronic, unformed, irregular Gout, is supposed to arise from an acrimonious humour of the same sort as that which produces the paroxysms of regular Gout; but with this singular and unaccountable difference, that whereas the *materies arthritica* increases so rapidly in the

regular Gout, that the vis medicatrix naturæ is frequently obliged to expel it all at once, by periodical fits of Gout: the materies arthritica of the chronic Gout, on the contrary, never accumulates, but remains in the juices at a certain point, just sufficient in force to be able, by irritating the nerves, and attacking different parts in the course of its circulation through the body, to excite all the complaints imputed to this disease.

Of the arguments that have been adduced in support of that theory of the Gout, which supposes a materies arthritica, or specific gouty matter, one of the most obvious and common is furnished from the appearance of the chalky concretions in the joints of those who have been long afflicted with the regular Gout; such concretions being presumed to arise from repeated depositions of gouty matter, and accumulated from
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the frequent despumation of gouty juices ; but, unluckily for this argument, it is demonstrable, that these concretions are void of all acrimony ; that, on the contrary, being of the nature of absorbent earth, or chalk, it is their peculiar property to correct and destroy acrimony ; and that, in all human probability, they are the residuum of the lymphatic juices, which have been extravasated, sometimes in a greater, sometimes in a smaller proportion, by the violence of each returning paroxysm.

In consequence of the notion, that an acrimonious matter in the juices is the immediate cause of Gout, it has become a received opinion, that each paroxysm of Gout is a salutary effort of nature to expel the morbid cause ; and that a regular fit performs that office so effectually, that the constitution is for a time perfectly cleared of it, not one particle remaining at

the termination of the paroxysm. But whatever be the cause of Gout, this last argument is contradicted by the clearest evidence; for the body is so far from being cleared of the gouty cause, by a fit of Gout, that after the most perfect paroxysm, another equally severe may be immediately excited, by the irritation of a smart purge; by the agitation of the passions; or by whatever else is capable of stimulating, in a sufficient degree, the nervous system. Hence it is not unreasonable to conclude, that either the cause of the Gout is not acrid matter in the juices, or that a gouty paroxysm is not a critical discharge of it.

The red sediment, so copious in the urine during the whole period of a regular fit of Gout, has been instanced as another proof, that nature was then employed in discharging the arthritic matter. But I believe it is
gene-

generally known, that such urine, and such a sediment, is by no means peculiar to paroxysms of Gout; the same being common in erysipelas, acute rheumatisms, bilious fevers, hysterical colics, and all diseases originating from, or accompanied with a redundancy of bile; the red matter at the bottom of the urine is real bile; which continues to pass off by the kidneys, as long as any of it remains extravasated in the hepatic or gastric regions.

The whole train of symptoms imputed to irregular, unformed, chronic Gout, having been observed suddenly to vanish, or greatly to abate, upon the eruption of a simple gonorrhœa, without the least concomitant circumstance or suspicion of venereal infection; such gonorrhœa is generally considered as a discharge of gouty matter from the surface of the urethra, the vis medicatrix having happily

hit upon that easy mode of expelling it from the body. But to shew how little consequence ought to be given to this conjecture, we have only to recollect, that hysterical young women, in whose juices little acrimony of any kind, none, at least, of a gouty nature, can be supposed to exist, often experience an immediate abatement of, and sometimes a total liberation from, every troublesome and even alarming nervous symptom, upon the appearance of a discharge similar to the above mentioned, viz. the fluor albus.

So strongly, however, is it the opinion of the public, that the seeds of all diseases are to be traced to iniquation, or impurity of the juices, that every cutaneous eruption, every itching of the skin, is accounted an effort of nature to expel some particular acrimony; and when, as frequently happens, on the appearance of cutaneous itchings or eruptions, complaints

plaints which have been long troublesome under the name of an irregular Gout, or have been long prescribed for, as hysterical, hypochondriac, nervous, &c. seem to be considerably relieved; in the former case, the eruption is said to be an expulsion of gouty matter, and in the latter case of scorbutic matter; which last kind of matter is also supposed to be a very frequent cause of nervous disorders: nevertheless, in the following pages we shall endeavour to prove, that such eruptions ought rather to be deemed the immediate offspring of nervous agitations; and that, so far from being the cause, they are really the consequence, of the very disorders they are supposed to occasion.

C H A P. V.

Of the true cause of the Gout—Of the nerves, and the moving principle resident in them—its powers in the body—the cause of circulation.

FROM the observation and analogy of facts, and such other proofs as are obtainable concerning so intricate and evanescent a subject, the subtle nature of which eludes the senses, and all the common modes and instruments of investigation, it appears very probable that the proximate, as well as the predisposing cause of Gout, is only to be found in the nervous system. But to explain and illustrate that opinion, and “to give a reason for that faith which is in us,” it will be necessary to attempt the investigation of the nature and office of the nerves,
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and of the moving principle resident in them ; and to trace its influence, powers, and operations, in the œconomy of health, as well as in the formation of disease. We shall commence this task, by an enquiry into the nature of circulation, and into the means by which that first act of life in vegetables and animals is performed.

Whatever power it is that, in the vegetable kingdom, conducts the juices from the root of the tallest tree through the ramifications of the minutest vessels in every leaf, on the most distant branches, must be a general principle, and the only moving principle in nature : perhaps the agent, appointed and substituted by the Divine Mechanic, to actuate, animate, and conduct the machine of the solar system, and in it to perform every operation which we distinguish as the work of nature. Such a principle
is

is the electric or etherial spirit, which, under the appellation of phlogiston, may be the uniting principle of every modification of material existence; animal, vegetable, and mineral; and, under the character of æther, is the bond that connects the most distant parts of the universe.—And these qualities of matter, which philosophy has distinguished by the names of attraction, gravitation, repulsion, are no other than different effects of the power of this subtile agent.

It would be absurd to suppose the existence of two equally active and subtile principles, and in direct contradiction to the simplicity of nature; which, from different modifications of a very few materials, produces all the variety of effects, operations, and substances, we behold around us. We must therefore admit this same universal, ethereal spirit, as the conductor
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of the animal juices in the minima vasa, where the power of the heart ceases to operate in the propulsion of them; and, in all probability, the power of the heart does not extend beyond the first or second series of vessels; and perhaps the pulsation of the heart and arteries may be as much designed for the liquefaction of the red blood, as for the propulsion of it; and I shall take it for granted that it is the same ethereal spirit which resides in the nervous system, under the denomination of *nervous fluid*; because I know of no other principle in nature that can execute that office, and I do not think myself at liberty to invent one.—In each capacity, as phlogiston, or uniting cause of all the various substances that compose the animal frame, as conductor of the circulating juices, or as the moving agent and the spirit of life in the nervous system, it may be, and most probably

probably is, under each denomination, equally the medium of sensation ; and being the only active principle hitherto discovered in nature, it may be considered as the instrument of expansion, and growth, both in animals and vegetables.

This ethereal spirit pervades every fibre ; and moving, as we shall afterwards endeavour to demonstrate, in all animals, progressively from the center to the circumference, in a vascular direction, whilst it expands and invigorates the solids, it carries with it the whole tide of circulation, and terminates its course, and escapes by the exhalent vessels, which open on the external as well as on the internal surfaces of the animal machine, leaving on each surface a certain degree of moisture and softness, suited to the various occasions of the animal œconomy. That the electric or ethereal fluid is the animating

mating principle and source of circulation in all living bodies, as well vegetable as animal, appears more evidently from this circumstance, that both animals and vegetables are vigorous and healthy, in proportion as this spirit abounds in them; and when it is deficient they are weak and sickly. As an example: it is the singular property of an east wind so to change the condition and disposition of the surrounding ether, or so to impair the power by which all living bodies collect and retain such a portion of that fluid as is necessary for the business of life, that while the wind is in that quarter, delicate fabrics, both animal and vegetable, give marks of great disorder and debility; in vegetables of hasty growth, the juices cease to move, the lively green changes to a sickly yellow, and, as in actual death, insects and vermin of every kind generate on the surface.

of

of the plants. This is termed a blight; but if before the organization of the vegetable is impaired, the wind should happen to change to any point between the south, and west of north, restoring the nutritious quality of the atmosphere, and the natural powers by which living bodies attract the spirit of life, circulation is gradually renewed, the plant recovers, and all the insects perish, being no longer able to draw nourishment from that, which, now restored to life and vigour, itself powerfully extracts the vital principle from them and from every thing around it. I own it is strange that puny insects should breed and thrive under the influence of an east wind, which blasts the most luxuriant plants, and causes every other kind of life to shrink under its malignity; it is a fact, however, which hop-planters in particular are perfectly acquainted with. Perhaps the copious
nourish-

nourishment, refunded by the expiring plant, does more than atone to the insects for the sterility of the east wind. The carcass of a dead animal, or vegetable, in its dissolution, becomes a hot-bed to the embryos of the same, or another species of existence.

The animal fabric possesses great auxiliary means of collecting and retaining the ethereal principle, which vegetables are not endowed with, such as the perpetual motion of the heart, and of the arterial system ; the motion of the lungs, including that which they communicate to the surrounding parts ; every kind of voluntary muscular action, and that which arises from the locomotive faculty ; also the power of applying occasional and immediate helps by the channel of the stomach, by clothing, friction, &c. all which greatly increase and stimulate the electric quality of the body ; and by them, the human body parti-

D

cularly,

cularly, is enabled much better to endure every alteration in the atmosphere than the vegetable; yet the diminution of the vital ether, occasioned by the malign influence of an east wind, immediately recalls to the valetudinarian each symptom of chronic complaints, to which, at any former time, the body may have been liable; such as rheumatic pains, aguish feelings, nervous affections, asthmas, and every other indication of difficult circulation; together with a painful sense of general weight, oppression, and languor, in which the mind largely participates, being on these occasions troubled with a variety of gloomy ideas, and melancholy apprehensions, although unsupported by any rational cause, or particular object of fear; all which vanish, the moment the wind changes to another quarter. Now, we know of a certainty, that the chief circumstance in which the
east

cast differs from all other winds, is in the condition or state in which the electric fluid exists at that time in the atmosphere, where it appears inactive, or so confined and unattainable, that, at such a time, no electrician ever attempts to perform any experiment of electricity.

C H A P. VI.

The rationale of digestion—not performed by any specific menstruum—the attractive power of the stomach.

ALTHOUGH it is extremely probable that this universal spirit, which is known to surround every body, as a kind of electric zone, of various dimensions, proportioned to the nature of each, may enter by all inhalent veins, as it passes off by every exhalent artery; yet the stomach of the animal, and the root of the vegetable,

able, must be esteemed the chief collectors, and distributors of it through the fabrics of both. It has been already observed, that this fluid is the connecting principle of every material substance, and in that capacity is known by the name of phlogiston. Which phlogiston the stomach of every animal seems to possess the power of extracting, from all substances proper for the nourishment of its body; hence it follows, that the food dissolves in the stomach, in proportion as the phlogiston, or cementing principle, is extracted from it, by its digestive power.

It has been remarked, that the very moment food toucheth the bottom of the stomach of a man faint with hunger and fatigue, he instantly experiences its cordial and invigorating powers, as if the essence of nourishment was immediately conveyed from the food through all the animal

mal frame ; and so, certainly, is the case : the moment any food is swallowed, the stomach begins to extract from it the vital principle, the phlogiston, the essence of nourishment ; and at the same instant distributes it through every nerve and fibre of the machine.

The phlogiston, or ethereal spirit, passing from the food through the minima vasa of the stomach and intestines, dilates, and renders them pervious, and carries along with it the more subtle parts of the food, together with the liquids in which they are diluted into the general tide of circulation. The term absorption, generally used to express the peculiar action of the lymphatics and lacteals, implying a suction at one end, and the absorption of a fluid at the other, seems applicable only to rigid tubes : but the action of capillary tubes, even of the rigid kind, is occasioned probably by the

current of the ethereal spirit, passing with velocity through them. For we know that the application of the electric spirit to a capillary glass tube, gives a rapid motion to the fluid, which was stagnating in it before. Though this rationale of digestion may not be altogether unexceptionable; yet it is less exceptionable than any other; and as it is nearer to the simplicity of nature, it is the more likely to be true. I do not pretend entirely to exclude the assistance of a gastric liquor; but, for the following reasons, no menstruum can of itself account for all the phenomena of digestion.

A great, and, in my opinion, unanswerable objection to the agency of a menstruum, as the sole instrument of digestion, is, that it seems to act with equal power, when diluted with such liquids as are known to promote the dissolution of food, or when de-
luded

lugged with such as are by nature strongly disposed to prevent it. We see some men wash down their meals with a glass or two of water, others with three quarts of wine; and yet the business of digestion seems often to proceed more expeditiously in the latter case, than in the former, notwithstanding that it is the property of wine to impede, and of water to hasten, the dissolution of animal food. And though it is also the nature of ardent spirits most powerfully to oppose the dissolution of all animal food, yet we know that indigestions are sometimes cured, and very frequently prevented, by a timely use of ardent spirits. Now these facts can only be explained by admitting, in part at least, our theory of digestion, and supposing, that the attractive and electric powers of the stomach being greatly increased and stimulated by the wine and the spirits,

the extraction and evolvation of the vital principle from the food is thereby accelerated, and consequently digestion promoted; although in any other place but the stomach, wine or spirits would be the most effectual liquid in which to preserve both animal and vegetable substances from dissolution.

Another objection to the agency of a menstruum is, that by a sudden and violent agitation of the mind, especially when there is in the constitution an extraordinary irritability of the nervous system, the whole process of digestion is disturbed, and interrupted, and all the fluids contained in the stomach frequently converted into a pungent acid; the stomach ceases to extract the phlogiston, or to distribute it; and instead of the preceding genial warmth that glowed all over the gastric region, which seemed to accompany, and to originate from, the distribution of the

the animating principle, in its progress from the food, towards the circumference of the body, through all the ambages of the abdominal viscera, all warmth is suddenly banished from thence, and is succeeded by faintness, nausea, and ejection of the contents of the stomach. Now, as all these phenomena of indigestion are produced by the sole influence of the mind, and as the mind can operate only on the nervous system, it naturally follows, that the process of digestion must be chiefly under the management of the nervous system.

The last argument I shall trouble the reader with, against the probability of digestion being performed by a dissolvent menstruum in the stomach, arises from this consideration, that such a menstruum, being derived from the general mass of juices, should be more or less pure, and consequently more or less active,
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in proportion to the purity of the juices from whence it derives ; but, on the contrary, we find, that where the general mass is most impure, as in scrophulous, leprous, and other cases of original taint, the supposed gastric menstruum is most active in digesting the food ; or, in more just terms, scrophulous and leprous people have the best digestion. But it is also very worthy of particular remark, that though the impurity of the juices does not impair the powers of digestion, the least disturbance of the nervous system interrupts, and, if continued, destroys it.

The electric and attractive power of the stomach extends not only to the extraction of the phlogiston from the substance of our various food, but also to the retention of that food firmly and quietly in the stomach, during the process of digestion ; for however violent the motions of the body may be, which
other-

otherwise would produce in the stomach the most nauseous jumble of its contents, a healthy person, accustomed to the exercise, will, without any unpleasant consequences, immediately after a hearty meal, ride the hardest trotting horse; he will vault, he will stand on his head, yet all keeps firm and quiet, nothing moves, or changes its place in the stomach. The powers by which the stomach attracts the food, and extracts the principle of life from it, seem to be connected, and to depend on one and the same cause; which cause must be the moving principle, for it is under the dominion of the mind. But though we deny that digestion is performed by means of a specific, appropriated menstruum, that is by means of a liquid capable of dissolving the food, in a manner similar to that by which aqua regia dissolves gold; yet some fluid is certainly necessary to render the powers of the stomach efficient.

CHAP.

C H A P. VII.

The electric powers of all organized bodies; the universal agency of the ethereal or nervous principle, in the œconomy of health, and in the production of diseases, etc.

THE nervous or electric fluid, when collected by the stomach, passes to the extremity of every fibre and vessel; on the surface of the skin it escapes with some highly attenuated juices, in which it is embodied, and is there known by the name of Sanctorian perspiration: that portion of it which pervades the intestinal canal is probably the cause of the peristaltic motion of the guts. In general, the nervous spirit animates and braces every fibre. The want of a due proportion, and proper circulation of which, induces

duces a state of relaxation ; and whatever increafes its proportion up to a certain point, and renders the body more capable of attracting, retaining, and conducting it in fuitable directions, deferves and obtains the name of a bracer.

Although there may be a plenum of the ethereal principle in all the regions of creation, and that all bodies poffefs a portion of that principle ; yet living bodies, vegetable and animal, have the power of attracting and retaining a proportion fuited to the functions of their nature, far beyond that which dead matter poffeffeth.

This fluid, then, which in motion directs and conducts circulation, and, in a more intimate connection, under the name of phlogifton, is the cement of both folids and fluids, may in both thefe capacities, as has already been obferved, act as a fentient principle,

ciple, communicating to the whole electric frame, sensation from any point, as from a center. And such being the importance of this fluid in the animal œconomy, it may be considered as the chief instrument in the preservation of health, and in the production of disease. An extraordinary diminution of this ethereal spirit, will induce a sense of debility and faintness; and the diminution may be carried so far, as to produce a stagnation of the juices, and mortifications in the solids of the body, together with a dissolution and putridity of the whole; as seems to be the case in very malignant fevers. This ethereal fluid is not only the acting principle in all the phenomena in the animal œconomy, but it seems to be the guardian of life and of health; the quantity and condition of which must be first affected, before any injury can happen to the animal machine.

For

For this reason it is, that the onset of every disease is accompanied with such symptoms as sufficiently prove that the regular motion of the animal spirit, from the center to the circumference, is disturbed or inverted; hence sickness, nausea, bilious vomitings, giddiness, lassitude, debility, faintness, &c. are equally the consequences of the bite of the venomous animals of the East, of the application of febrile infection, of the malign influence of an unhealthful and tainted atmosphere, which, upon some occasions, seems to destroy the electric powers of the body: and, lastly, of the operation of the depressing passions of fear, grief, &c. by all which the due portion and agency of the vital principle may be disturbed, and even destroyed.

Now, although it cannot be doubted, that all these causes produce similar effects, and in a degree equal to
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the power by which each is capable of disturbing, inverting the proper motion, or dissipating the due proportion of the nervous ether; for in that way only it is that the mind can act upon the body: yet how, and by what mechanic means it is, that the venom of a serpent, the infectious matter of a malignant fever, the influence of a tainted atmosphere, or the depressing passions of the mind, do draw off and dissipate the nervous spirits, is equally out of the reach of investigation, as is the power by which iron is capable of withdrawing the electric principle from a cloud, when overcharged with it: they are, however, facts which can neither be doubted nor explained: and that the juices may stagnate by a diminution of the conducting power, or fall into putrid dissolution, by the dissipation of the uniting principle, is neither difficult to be understood, nor explained.

plained. A kind of proof of this theory arises from the practice in such cases; the best medicines being those that most effectually and most speedily restore to the stomach, the power of collecting and distributing the ethereal principle, which is best done by vomits, the Peruvian bark, cordials, and fresh air. Topical applications for the bite of venomous animals I speak not of; nature having commonly provided, and experience discovered, some specific in that way, wherever such animals are found.

C H A P. VIII.

The same subject continued, with illustrations.

THE regular circuit of the ethereal spirit, from the stomach to the circumference of the animal machine, seems to be essential to health, and to the continuation of life; for when any thing infectious, venomous, or poisonous, is applied to the body, its first effect is to interrupt the progress of that spirit. The pores are immediately shut up, perspiration ceases, the peristaltic motion of the bowels is disturbed, atony, nausea, vomitings, ensue. Whatever, therefore, contributes to restore the natural tide of this fluid, and to renew its course from the centre to the circumference, bids fair to prove a remedy in most diseases. But as the cause
that

that disturbs the circuit of the nervous spirit may be different, so should an remedy be. When the cause is the unfriendly stimulus of some acrid matter in the gastric region, suitable evacuants will prove the most efficacious sudorifics, and febrifuges. Sydenham, on the other hand, says; that so enormous were the vomitings in the plague, that he could administer no internal medicines; but he cured the vomitings by such external applications as induced a sweat; by which the natural tide of the nervous fluid being restored towards the surface of the skin, the stomach recovered its electric powers, of collecting and distributing the ethereal agent.

As almost all acute and chronic diseases are ushered in by the loss of perspiration, its return may be generally considered as the harbinger of health, and the test of crisis.

At the same time, there is good reason to suppose, that the insensible or Sanctorian perspiration itself, is no otherwise important, than as it is the completion of the ethereal circle; the salutariness of visible perspiration arises from its being the concomitant circumstance of the easy and regular passage of the moving principle, by which the progressive motion is continued throughout all circulation, and all the operations of the animal œconomy proceed as they should. In this instance, as in others, the visible evacuation is only the covering or consequence of the invisible agent.

C H A P.

C H A P. IX.

*Of menstruation in females ; its causes ;
and how the same causes operate in
men.*

IN the course of our inquiry into the importance of the ethereal or nervous fluid, in the production of the phenomena of health and of disease in the animal œconomy, that periodical one to which the female sex is subject, offers itself as one of the most singular, as well as most important phenomena ; on which the continuation of the whole human species, as well as the health of the female part of it, in a great measure depends ; I mean menstruation. The various doctrines for the explanation of this subject have been successively abandoned, and at present, I believe, it is not comprehended in any theory.

A due attention to the phenomenon, and its concomitant circumstances, may lead to the general cause.

This evacuation is not in consequence of an effort of nature to discharge from the juices something acrimonious, and offensive to health ; for the blood discharged in menstruation is in its nature mild, as the general mass from which it flows. The evacuation is not the consequence of plethora ; for repeated, and copious bleedings, will neither prevent it, nor atone for the want of it. And another proof that it does not originate from plethora is, that in cases of obstruction, a few drops of blood distilling from the nose, from the corner of the eye, the ear, the end of a finger, and generally at the usual periods of menstruating, in regard to the health of the individual, seem to answer all the salutary ends of the more copious and natural discharge.

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The late ingenious Dr. Whytt, already mentioned, in his treatise on nervous diseases, gives a singular instance of this, in the history of a female, who, the monthly discharge by the uterus being obstructed, had, every twelve or fourteen days, a small hæmorrhage from the left ear, which continued without interruption or diminution, though she lost by the lancet forty ounces of blood in one month.

In the same author there is an account of another case no less extraordinary, viz. that of a woman who, six weeks after bearing her second child, was seized with a pain in the middle of her fore arm, striking down to the middle finger of her left hand. Next day, she felt a pain in the point of that finger, whence issued about four ounces of blood. At the distance of twenty-four hours she lost near an ounce of blood in the same manner; and notwithstanding

she was repeatedly blooded, yet for some days, almost at the same hour, this hæmorrhage returned, but always in smaller quantity. In this woman the lochia had stopt soon after the delivery.

In some irregular cases, instead of a sanguineous discharge, one of a white colour makes its monthly appearance, which seems in its effects to be equivalent to the other in every thing, but in what relates to the continuation of the species. Women seldom breed under such an irregularity.

In consequence of menstrual obstruction, the female is generally attacked with hysterical and other nervous symptoms: and the nervous system seems so remarkably affected by all that relates to menstruation, that I am led to that quarter to look for the cause of it.

That there are men subject to discharges of a nature similar to
men-

menstruation in women, and under the same periodical influence, may be learnt from two cases in the Philosophical Transactions, No. 171, and No. 272. The first is, the case of a man who had a flux of blood from the thumb of the left hand every full moon, to the amount of half a pound; and the other is the case of a man who had a flux of blood every month from the first finger of the right hand, to the amount of four pounds.

That menstruation, the hæmorrhoids, and the gout, are, in some cases, in succession to each other, and in the constitution seem to answer the same purpose, and to originate from the same cause, will appear probable from the following instance, also related in the Philosophical Transactions, No. 337. A woman lived at Lamerton, near Plymouth, and died at the age of eighty-

ty-fix. She continued to menstruate until seventy; when that discharge left her, it was succeeded by a similar one from the hæmorrhoidal veins, which continued until she was past eighty. She was, till then, healthy and strong, of a vigorous aspect, smooth, plump, and florid in countenance, like one not half so old. When the hæmorrhoids failed, paroxysms of gout succeeded. She was never sick before the hæmorrhoidal flux ceased, except once, when she was seized with the plague, which terminated in a critical abscess, during which sickness she continued to nurse a male child, who lived to be of the faculty, and gave this account of his mother.

Another fact, proper to be recorded, is, that ulcers, and sometimes eruptions, succeed to, and apparently compensate for menstruation, when obstructed, or terminated: and that
such

such ulcers or eruptions are observed to have an extraordinary discharge at the return of each menstrual period, or of the great changes of the seasons; which discharges keep off, in a great measure, the ill consequences of a deficiency of the regular flux of menstruation; not, however, by venting any thing acrimonious; for, as nothing acrimonious is, by the obstruction of the menses, retained in the body, we have no right to suppose, that to compensate their loss, something acrimonious must be discharged from it.

From the foregoing facts and observations it is evident, that it is not the quantity, nor apparent quality of the visible matter discharged by monthly evacuations, that is of importance to the health of the female, or of the male who is subject to them.

Also it appears from Dr. Mead's inquiries concerning the influence of
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the sun and moon, that the human frame is extremely affected by certain situations of these heavenly bodies. Now, it is more than probable, that at such immense distance, these luminaries can act only on that ethereal medium that fills the universe; which being of a congenial nature, communicates with, and creates ebullitions in the subtile, elastic, nervous spirit, the impetus of which ebullitions may open a variety of different passages, from which may distil different humours, according to the nature of the vessels through which the impetus makes its way out of the body.

An analogical example will illustrate this idea. — When a copious flow of tears effectually terminates an hysterical paroxysm, or composes these agitations to which women of great sensibility of mind are subject, neither the quantity nor quality of the
fluid

fluid *visibly* discharged at the lachrymal glands, can be considered as the object or cause of so remarkable a crisis. The preceding symptoms were the effect of an ebullition of the nervous fluid, the impetus of which being directed, by an unexplicable operation of the tender passions, to the lachrymal glands, from thence stimulates the distillation of tears, along with which it effects an escape.

In short, the ethereal principle seems to be the medium, by which alone all causes, external or internal, the operations of the mind, the phases of the sun and moon, or the great changes of the revolving seasons, can affect the juices of the human body. When in its capacity of phlogiston, it is too much diminished, a proportionable stagnation and dissolution of the juices, together with mortifications, &c. are the consequences. When the phlogiston is increased

creased beyond the standard of health, in the juices, they acquire an inflammatory disposition, or too great a tenacity and adhesive quality.—When in its capacity of nervous ether, it is stimulated or agitated, the body is then subject to all manner of nervous complaints, spasms, gout, &c. and when any sudden commotion is raised in the nervous system of an irritable female, it may, and frequently does, terminate at the lachrymal glands: or in a spasm, and pain of the side; a head-ach; a cramp at the extremities, a fit of vomiting, or purging; in short, wherever the impetus of the nervous fluid forces its way, effects will be produced suitable to the part attacked.

C H A P. X.

The cause of menstruation, of the gout, and other periodical commotions and evacuations, farther illustrated, and proved to be the same.

A Periodical ebullition of the moving principle seems natural, and therefore necessary, to all the human species, males as well as females ; the more delicate the mechanism of the fabric, the more frequent are the returns of the period, and the more visible and extraordinary are the effects.

The peculiar texture of the female frame has subjected women to a monthly agitation of the nervous system ; probably, and according to the general notion, of both the learned
and

and vulgar, from lunar influence ; the impetus of which agitation opens the uterus, and produces menstruation ; and nature availing herself of what may properly be termed an infirmity, converts it to a purpose essential to the preservation and increase of the human species. The periodical tide is directed to the matrix, which, thus bathed, and replenished with the ethereal spirit, becomes fitted to impart to, and preserve the principle of life in the first rudiments of animal existence *. Sometimes, when
fangui-

* As there are males subject to all the nervous disorders incident to women, and whose frames seem to have inherited or acquired an equal degree of irritability and delicacy, so far as even to be subject to monthly evacuations ; on the other hand, there are females who possess all the firmness natural to the masculine gender, whose nervous systems bid defiance, in a great measure, to the phases of the moon, to the revolutions of the other planets, and,
in

sanguineous appearances fail, the fluor albus in some measure answers the purpose of venting the impetus of the menstrual commotion; but the other great purpose of nature, the keeping of the matrix in a proper state, for increasing the species, is never properly answered but by a sanguineous menstruation.

When the impetus misses the uterus entirely, strange commotions agitate the female frame; and sometimes regular fits of gout are the consequence; whereas, during the

in general, to almost every thing that is capable of raising the most important commotions in the fabric of the more delicate of the sex. Those viragenous females, even when regular, have hardly more than an appearance of menstruation, and sometimes, without any injury to their health, are deprived even of a shewing, as it is called, for many months. Amongst the northern Scythians, the females are said to menstruate only in summer, so hardened are they by the climate, by inheritance, and by their vigorous mode of life.

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perfect

perfect enjoyment of that periodical discharge, women, though born of gouty parents, are seldom or never afflicted with that disorder. In like manner, when lying-in women are deprived of a sufficiency of the lochia, that circumstance also frequently brings on a gouty attack. These facts may serve to illustrate each other; and we may venture to conclude, that as a gouty paroxysm seems to atone for the want of menstruation, or of lochia; and, on the other hand, as menstruation, whilst regular, supercedes hereditary gout, the same agent must be the author of each, and in the constitution the same end answered by each.

Sedentary men, whose nervous systems are easily affected, and who often possess a feminine delicacy, are liable to a periodical evacuation of thick urine; which symptom or appearance, as it accompanies the crisis
of

of most diseases, may always be considered as the consequence of some prior ebullition.

It has also been observed, that men of more delicate constitutions are never subject to the gout, nor sensible of almost any other disease, whilst the hæmorrhoids, an ulcer, or cutaneous eruption, affords an open and ready channel for periodical ebullitions to pass off; but these drying up, periodical attacks of gout succeed, and supply their place.

In like manner, a female finds little inconvenience from irregular, obstructed, or terminated menstruation, if the hæmorrhoids, an ulcer, cutaneous eruptions, or fluor albus, succeed to it; yet we know that nothing acrimonious is discharged by the menses, and therefore have no reason to suppose that any thing acrimonious is discharged by the ulcer or fluor albus, which succeeds to, and com-

penfates for the lofs of the menfes ; which opinion is alfo confirmed by the following obfervation ; viz. that a few drops of mild blood, periodically, from the nofe, the ear, &c. will alfo compensate menftruation ; but that if neither of thefe evacuations come to the relief of an obftruded female, or, if having once come, they again difappear, ſhe then is ſubject to gout, hæmoptiſis, dropſy, &c.

As, therefore, any of the above mentioned ſymptoms are capable of relieving, ſucceeding, and ſupplying the place of each other, they muſt all be conſidered as originating from the ſame cauſe, and anſwering the ſame end.

Females, whiſt young and regular, or if they are troubled with hysterical, or other nervous affections, are ſeldom or never ſubject to gout ; and hypochondriacal men, or ſuch as are of a very delicate texture, are
equally

equally out of the reach of that disorder. The reason of these exceptions is probably this, that both sexes, of the foregoing description, suffer a certain periodical deflagration, discharge, or paroxysm, excited by the influence of the moon, the change of the seasons, and other periodical causes, by which stronger constitutions are not affected; which deflagrations pass off in females by the matrix, and in males generally by the kidneys; and by one of these passages every commotion of the nervous fluid, which might otherwise have produced gout, &c. is vented. But when, either in males or females, nature has opened other channels, such, for example, as are the hæmorrhoidal veins, the surface of an ulcer, a considerable cutaneous eruption, the fluor albus, &c. each periodical ebullition vents itself gradually as it rises, by increas-

ing the quantity of the ordinary discharge from the parts affected; and thus do these passages act as safeguards to the body, in all sudden or periodical commotions of the elastic nervous ether; or, to speak in the language of electricity, are in the capacity of fixed conductors: by which violent shocks, such as gouty, hysterical, or hypochondriac paroxysms, erysipelas, hæmoptysis, apoplexy, &c. are avoided.

When we observe that gouty paroxysms may be safely discharged from the body by such outlets, it is not unreasonable to suppose, that if art could effect an opening to serve in a similar capacity, as an outlet or vent for accidental and periodical ebullition, gouty paroxysms might with certainty and safety be avoided. The success of such a plan will depend upon a proper choice of the part whence the gouty tumult

mult may most readily be evacuated, and of the means by which an outlet may most efficaciously be opened.

C H A P. XI.

The same cause exciting different symptoms, according to the nature of the viscus it attacks.

FROM the foregoing observations the following conclusions may be drawn, respecting the popular idea of acrimonious gouty matter in the blood. When in a case of irregular gout, the patient finds relief from the supervention of a gonorrhœa, the hæmorrhoids, or cutaneous eruptions, one ought not hastily to pronounce that these are discharges of gouty acrimony—they are forced out by the impetus of nervous tumult, which stimulates an evacuation or ef-

fect suitable to the nature of the part it attacks.

Of scorbutic acrimony the same opinion may justly be entertained; for, in general, it is true, that whatever greatly disturbs the nervous system, increases all scorbutic appearances; and, on the contrary, whatever composes the irritations of the nerves, proves an anti-scorbutic. Purging, and mercurials, by weakening and irritating, will often cover a scorbutic patient over with eruptions; when theriac. and such gentle opiate cordials, prove a certain remedy. Scorbutic, and nervous symptoms, constantly accompany each other; and although, when two symptoms always appear together, it is difficult to decide which of them is the cause, and which the effect, there is one fact, however, which will in this case prove a guide to the judgment: agitations of the mind,

mind, long continued, will cover that person over with scorbutic eruptions, on whom no such appearances ever existed while the mind was serene. In this case, the cause is evidently the nervous commotion; the effect, a cutaneous or scorbutic eruption.

Whatever be the exciting cause, the impetus of nervous agitation generally falls on that organ or viscus of the human body which happens to be the weakest; and the symptoms it produces are suitable to the nature of the part affected; viz. hypochondriac, or bilious, when it attacks the gastric region; and cough and consumption, when it falls on the lungs. Now, as these two diseases, hypochondriasis and consumption are justly considered as endemic in this country: the cause of both is probably the same, viz. the frequent, sudden, and violent changes of the weather. One hour, the genial breezes of the south

south allure the ethereal fluid to the surface of the skin, in the most salutary form of insensible perspiration; the next, it is repelled by the severity of an easterly blast. Thus checked, agitated, and driven from its natural course, and no drain open, such as hæmorrhoids, eruptions, gonorrhœa, &c. by which the commotion may immediately vent itself, it is not at all surprising that the impetus should frequently fall on the lungs, which are directly exposed, by their office, to all the severity and inconstancy of the atmosphere; whence arise cough and consumption: or that it should fall on the gastric region, whence hypochondriac symptoms originate. In proof of this doctrine, we find that by a metastasis of impetus, from the gastric region to the lungs, hypochondria often terminates in, and is superseded by a consumption; and that by another metastasis,

metastasis, from the lungs to the brain, a formed consumption is cured by the appearance of a mania; and that the most certain cure for both hypochondriasis and consumption, is an early migration to a serene, warm climate; the more southern, the more certain the cure. And it is much to be regretted that this advice, which ought to be the first, is generally the last, and therefore fruitlessly given, in consumptive cases. By the influence of a southern climate, the tide of the ethereal fluid is recalled to its natural channel, the surface of the skin; and the attack upon the lungs or gastric region ceases, together with every consumptive or hypochondriac symptom*.

Hæmoptysis,

* In hot countries, where the flow of the ethereal fluid to the surface of the skin is strongly encouraged, the tide of nervous ether is not disturbed

Hæmoptysis, or spitting of blood, is another of the disorders which very frequently originate from a morbid irritability of the nervous system. Dr. Mertens, of Moscow, in an appendix to his accurate history of the plague, which, in the year 1771, in that city, and the adjoining country, carried off a hundred thousand inhabitants, relates three histories of hæmoptysis, which, in their attack, and by their progress and termination shew, that the immediate cause was the tide of a nervous commotion turned suddenly upon the lungs, by which the orifices of some of the pulmonary arteries were dilated. The first two patients, one

turbed by such things as would, in this cold region, produce a stagnation or inversion of it. For example, I have known a gentleman use tobacco in Jamaica, with impunity and pleasure, in whom the slightest attempt to use it here, produced faintness, sickness, nausea, and vomiting.

a male;

a male, the other a female, had been always subject to a variety of nervous complaints; the third a carter, aged fifty years, who had lately been deprived of a daily discharge at the hæmorrhoidal veins, to which he had been accustomed from a boy: in each of them, the antiphlogistic and refrigerating method was persevered in, to a degree hardly prudent, as the doctor confesses, but without the least advantage or benefit to the patient. The doctor's own words are, "Spasmodicam nervorum affectionem, in pulmonibus liberam sanguinis circulationem impedientem, morbi causam agnoscens, largam emplastrum vesicatorium inter scapulas apponi suadebam. Elapsis quatuor horis, emplastri irritationem sentire cœpit, & ab hac eadem hora hæmoptysis cessavit." In the second case, speaking of the immediate efficacy of the blister, he says,

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“ A prima ejus irritatione, hæmoptoe
 “ cefſavit.” In the third caſe, “ Ad
 “ veficatorium confugiebam, quod
 “ hæmoptyſin ſtatim ſedavit.” I have
 been particular in copying the lan-
 guage of the author, leſt the cure
 might be imputed to the quantity or
 quality of the humour diſcharged by
 theſe bliſters. The cure was per-
 formed merely by withdrawing the
 nervous impetus from the lungs to
 the ſurface of the ſkin. The pre-
 ceding hæmorrhoidal diſcharge, men-
 tioned in the third caſe, I conſider in
 no other light than as the production
 of a nervous impetus, venting itſelf
 by the veins of the rectum; which
 impetus reverting, by ſome accident,
 to the lungs, occaſioned a much
 larger, and more dangerous evacua-
 tion from them. But as the ſame
 irritability of conſtitution which diſ-
 played itſelf in each of them, would
 naturally ſubject all theſe patients
 to

to frequent commotions of the nerves, which commotions might terminate again in a spitting of blood; in order to have rendered the cure complete, and to have guarded against a relapse, the blisters ought to have been kept open, or an issue, or other perpetual vent or opening, ought to have been elsewhere made.

C H A P. XII.

The same cause traced in the production of bilious disorders, acute and chronic—the proper method of treating them.

AMONGST the symptomatic diseases arising from nervous commotion, are all those denominated bilious. A redundancy of bile never happens but from a previous nervous agitation, and great and general agitations

agitations of the nerves seldom fail to produce a redundancy of bile.— Hence it is that violent passions, hysterical affections, the bite of certain poisonous animals, the infectious effluvia of malignant diseases, produce evacuations of bile proportioned to the effects they have upon the nerves. The revolution of the seasons, and the full and change of the moon, are known powerfully to affect the nervous fluid; in consequence of which, these revolving periods produce a variety of bilious disorders; hence the common observation, that it is necessary to purge every spring and fall; and hence the bilious fevers and fluxes, that abound every autumn; hence, also, the frequency of agues at these seasons. And in some of the islands in the West Indies, so powerfully does the moon influence the constitutions of those who have been much subject to agues, which

which is a disease of the nervous system, that they find it necessary to take the Peruvian bark every full and change. All these may be accounted *acute* cases of bile.

On the other hand, when the gastric region, and more particularly the hepatic organs, are the center, to which the daily agitations of an irritable system of nerves tend, anxiety, depression of mind, want of appetite, indigestion, broken and unrefreshing sleep, horrid dreams, a sense of general debility, a distinguishing tinge of yellow on the surface of the skin, together with frequent evacuations of bilious matter from the stomach and intestines, are the general consequences, and are denominated bilious symptoms of the *chronic kind*.

In short, the first ill effects of every stimulus of an unfriendly nature, are felt at the stomach, whether that sti-

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mulus be applied externally, internally, or originate from the mind: hence, it is, that females endowed with more than common sensibility of mind, and acuteness of feeling, however fair, and transparent white the skin originally be, seldom long escape the tinge of yellow, and other symptoms of redundant bile; the certain consequence of the frequent agitations, anxieties, &c. which the delicacy of their frame exposes them to; for in order long to retain a clearness of complexion, and the appearance of youth, as some do, to an advanced age, the nervous system must either be constitutionally firm, and little apt to be agitated or shaken, or all cause of irritation effectually guarded against and avoided; or the commotion, when it is excited, must be by art immediately and perfectly discharged.

Amongst

Amongst various unheeded causes of nervous distress, and all its consequences, is the habitual use of tobacco, to persons of an irritable frame; which, although by the force of practice, it may cease to excite actual nausea, sickness, and vomiting, fails not so far to disturb the stomach and gastric region, as to prevent appetite, interrupt digestion, and to produce every other symptom of gastric indisposition, accompanied with anxiety, peevishness, and yellowness of the complexion. A gentleman, who has long used it in considerable quantity, owned, that though it no longer produced sickness, yet when taken before dinner, it created heartburn and sourness in his stomach. The dinner and wine acted as opiates, and enabled the nerves to resist the unfriendly stimulus of the tobacco.

All these observations increase the probability of the supposition, that the stomach collects and transmits the nervous fluid — for when an unfriendly stimulus occasions any degree of obstruction or irregularity in the channels through which that fluid is transmitted from the stomach, the effect of such interruption is and must be first felt at the source, which is the stomach. And when the stimulus is in a very considerable degree, and very unfriendly, a total cessation of the transmission of the nervous ether from, or even a retrograde motion of it towards the stomach, may ensue; when, instead of moving from the center to the circumference, it will take the opposite direction, and the gastric region become the center of the impetus, with sickness, nausea, bilious vomiting, &c.

But

But although by nervous commotion bile is thus generated, yet when once extravasated, it becomes a powerful stimulus itself, to which a multitude of new symptoms owe their existence, and by which all the original ones are greatly exasperated. Amongst the last, is the interruption of the peristaltic motion, which the unfriendly stimulus of the extravasated bile renders more obstinate, and which will continue so, until by some suitable means, the ethereal fluid again acquires a progressive movement, and is transfused, with efficacy, through these parts; by which transfusion, the proper motion of the intestinal canal will be renewed, and its contents, together with the stagnant bile in the hepatic system, will be precipitately expelled, the bile acting as a stimulating purge, to hasten its own expulsion.

Sometimes, owing to its situation, the bile passes off by the kidneys instead of the guts: so that the same remedy, which in one case produces its effect with loose stools, in another case, apparently not different, will terminate the disorder by a flow of deep-coloured urine, which, on standing, drops a copious red sediment.

From this account of the general cause of bilious complaints, it is evident that their cure is to be effected in the following manner. — First, the bilious matter collected, and which, whilst it remains in the gastric viscera, will aggravate every symptom, must be evacuated, but by such means as do not irritate the nervous system. All rough purges, such as castor, oil, emetic tartar, and calomel, are improper, because by their violence, though they purge off the contents of the viscera, and the stagnant bile along
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with them, they irritate, by the roughness of their operation, the nerves into fresh commotions, which occasion fresh accumulation of bilious matter, which has given rise to the vulgar maxim and opinion, that bile generates as fast as it is purged off.

The second indication is, to compose the nervous agitations, to remove all irritating causes, to give firmness to the abdominal viscera, together with a proper direction and progressive motion to the subtile, ethereal, conducting principle, so that it may be efficaciously determined to a happy exit, in the form of Sanctorian perspiration, at the surface of the skin; which perspiration is ever deficient in all bilious, as it is in all gouty, and other nervous cases. Indeed it may be admitted as an axiom in physic, that a hard dry skin is an invariable concomitant of all disorders in the nervous system.

C H A P. XIII.

Rationale of a gouty paroxysm—Causes of it hereditary, but sometimes diverted into other channels, producing other diseases.

HAVING thus, in a cursory way, remarkd upon some of the most important phenomena of health and of disease, in which the nervous fluid seems to be the principal, probably the sole agent, it remains to trace the same principle in the formation of these symptoms that are arranged under the name of Gout.—And the arguments already adduced against the popular notion of a peculiar kind of acrimony existing in the juices of gouty people, and distinguished by the name of arthritic matter, will, it is hoped, facilitate the reception of our theory.

From

From Dr. Whytt's account of both disorders, it is evident that an irregular gout is not distinguishable from hypochondriasis, and other nervous disorders of the chronic kind. This remarkable sameness in the symptoms gives good reason to presume an equal sameness in the causes of both disorders. To this may be added another remark, that the predisposing causes of gout are precisely such as most eminently debilitate the nervous system, and are the general causes of a morbid irritability of the nerves; such as, being born of parents subject to hysterical, hypochondriacal, or other nervous affections, from whom an hereditary mobility of the nervous system has been derived: a sedentary life, anxiety of mind, excessive venery, intemperance in eating and drinking, and perseverance in the use of acid liquors; an interruption, or a termination of the
female

female periods ; cessation of the hæmorrhoidal discharge, &c. Such are the predisposing causes.

The proximate causes are all immediately stimulative of the nervous system, viz. the great periodical revolutions of the seasons, spring and autumn, violent debauches in eating or drinking, fits of anger, of fear, of sorrow, &c, any sudden shock of the mind, extreme cold, &c. all these act with more or less violence upon, and occasion more or less agitation in, the elastic nervous fluid.

It has been already observed, that the impetus of all nervous commotions usually directs its course to that part of the body that is weakest ; though it must also be acknowledged, that other causes, too subtil for investigation, seem to influence its direction, in many instances, to parts not apparently weaker than they ought to be. For example ; who can assign a reason why the passion of grief directs
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the tumult it occasions to the lachrymal glands, terminating the paroxysm in a copious flood of tears? or why, in women, the menstrual ebullition should be directed to the uterus, thence passing off in a sanguineous evacuation? or in cases of obstructed catamenia, by what peculiar predilection the ebullition should obstinately persist in passing off in a sanguineous eruption, sometimes from the nose, sometimes from the lungs, the ends of the fingers, &c. though large and repeated evacuations of blood are at the same time made by the lancet. In like manner, although the immediate cause by which the gouty tumult is conducted to some joint of the extremities, is obvious and intelligible, there is, probably, in all gouty constitutions, another invisible cause, a peculiar inexplicable bias, or tendency, which may, and probably does, powerfully

powerfully co-operate with the first and most obvious. The visible and obvious cause is, the large quantity of bile discharged into the intestinal canal, by the disorder in the gastric region, which precedes every regular paroxysm of gout.

Now, it is the known property of bile in the intestines, to create, as in hyſteric and bilious cholics, certain fevers of the bilious kind, &c. ſympathetic pains in all the joints, particularly thoſe of the extremities; and that great evacuations of bile into the intestinal canal are common in every regular fit of gout, is well known; and that the moſt probable time for ſuch evacuations to be formed is that particular period preceding the pain of the joint, when the gastric and hepatic regions are moſt affected. Bile, therefore, I conſider the chief inſtrument in conducting the gouty impetus to terminate in a ſpaſm of the
ligaments,

ligaments, and tendons of some joint of the extremities. It is no objection to this opinion, that every evacuation of bile into the stomach and intestines, even in gouty constitutions, does not produce a fit of regular Gout; it sometimes occasions only an erysipelas, and sometimes goes off in a diarrhœa; for to produce always the same effect, the cause ought to be accompanied always with the same circumstances. But who can at any time say, except from consequences, that the proper cause operates, and that all the necessary and usual concomitant circumstances attend ineffectually, to produce a paroxysm of Gout, or indeed any other effect in the animal œconomy? But that there is also, besides the stimulus and sympathetic effects of the bile, a certain bias in some constitutions, indeed in all gouty constitutions, to terminate every nervous commotion by a spasm
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in the joints of the extremities, appears more particularly from this, that there are many examples of men, who, from an extreme weakness and irritability of the nervous system, acquired or inherited, have suffered every degree of nervous agitation, and yet have never been threatened with a single gouty attack.

These observations may lead to a determination of the question, Is the Gout an hereditary disorder?

Although it frequently happens, that the children of gouty parents succeed to that part of their inheritance, the Gout, at a very early period, it also happens that they never do : and this last may be owing to either of the following causes ; although one parent may have been a martyr to the Gout, the children may derive a firmer system of nerves from the other parent, who had no complaint of that sort. The other reason

son may be, that although children do inherit the morbid irritability of their parents, yet the commotions to which such a nervous system is liable, instead of exciting gouty paroxysms, if the peculiar bias to direct the impetus that way be wanting, may, by taking a different course, terminate in hysterics, hypochondria, bilious complaints, erysipelas, piles, fluor albus, gonorrhœa, &c. and on the other hand, any of these last complaints in the parents, may appear in their children, in the form of regular Gout, upon the principles we have already endeavoured to establish. All the above mentioned diseases being only different symptoms of a morbid irritability of the nervous system, and may, and do alternate with each other, according as circumstances may happen to direct the impetus to one part of the body or to another.

C H A P.

C H A P. XIII.

Why a gouty paroxysm occasions general atony, only when it attacks the stomach.

AS in the animal machine there must be a constant waste, so must there of necessity be a means of procuring a constant supply of the ethereal conducting principle. This office seems to be assigned to the stomach, and it is this circumstance that particularly constitutes that viscus, the sensorium, where every disturbance of the nerves is immediately felt. Whatever agitates the nervous system, must interrupt the regular course of the ethereal tide from the stomach; and when that nervous spirit is impeded or interrupted in its course to the circumference of the body, it ceases to be collected

collected at the center. In consequence of this deficiency, the capillary vessels are no longer distended as they should be, and as they are whilst the electric fluid passes along their surfaces, in its regular course, and in its due proportion; on the contrary, the capillary vessels in some measure collapse, the juices proceed with difficulty, and a sense of oppression and anxiety is felt about the gastric region. Amongst valetudinarians, this difficulty of circulation awakes a variety of aches and pains, and renews all the chronic complaints to which at any time they may have been subject. As is the case in the deficiency of electric matter, which is the constant attendant of an east wind. In some instances, one may even conceive that an inversion of the regular and natural motion of the conducting principle has taken place; in which case

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the stomach, instead of distributing, and supplying the vital principle to every part of the body, becomes the point to which it tends in a retrograde way, and whence it makes its escape, in paroxysms of nausea, bilious evacuations, vomiting, &c. as happens when a fit of the Gout attacks the stomach. And this seems to solve the difficulty, why the Gout in the stomach occasions atony, faintness, nausea, and debility of system, which produces inflammation, together with increase of spirits, vivacity, &c. when it attacks any other part of the body. For in whatever other part a gouty or nervous commotion fall, and however near to the stomach, so that it be not immediately in it, it will proceed in its office of collecting and supplying to the body a sufficiency of the conducting spirit to carry on circulation, and to animate the machine; as is the case in hæmoptysis, consumption,

consumption, &c. In contending for the importance of the stomach, I do not mean to deny that of the brain. From the brain the nervous fibres originate, these conductors of the nervous fluid; and it may be the office of the brain to refine and develop the nervous ether, and so to assimilate or combine it, as to render it suitable for the business of the animal œconomy. And though the nervous ether appears to me to be distributed by the stomach, as from a center, it may pass through the brain in its way to the circumference.

G. H. A. P. - XIV.

The progressive symptoms of a gouty paroxysm enumerated and accounted for.

THESE observations premised, we proceed, upon no very improbable grounds, to suppose the following rationale of the origin and progress of a gouty paroxysm.

In all gouty constitutions there is evidently an acute irritability of the nervous system, which, during the paroxysm, is in the extreme. Sydenham observes, that a fit of Gout may with propriety be termed a fit of passion. It is of no importance to the present question, whether that irritability of the nervous system, and mobility of the nervous fluid, have descended from the parents, and consequently are qualities annexed

nexed to the original mechanism of the fabric, or have been acquired by intemperance, and other causes unfriendly to the constitution; upon such a constitution any of the causes already enumerated as the immediate stimuli of nervous commotion, may induce a paroxysm. The first effect of the stimulating cause is to interrupt the usual salutary progress of the ethereal principle towards the surface of the skin; and therefore this, like most other disorders dependent on the nervous system, is ushered in, and accompanied throughout, by a total loss of the Sanctorian perspiration. The disagreeable consequences of this alteration are first felt at the stomach, and about the hepatic region, producing inappetency, flatulency, and a variety of alarming symptoms, that give earnest of the approach of the fit. And lastly, effecting a discharge of

bilious matter into the intestinal canal, the symptomatic pains occasioned by which, direct the impetus of the whole commotion to a spasmodic termination in some joint of the extremities, on the ligaments and tendinous membranes of which it seizes with intolerable pain. To effect this spasm, the animal spirits must of necessity make a movement from the center towards the extremities; and, as the spasm itself, and likewise the consequent swelling and inflammation about the part, constitute a vent, an outlet for the ebullition of the nervous fluid, its progressive motion from the center is renewed and continued, and the stomach, in a great measure, recovers its office, of collecting and transmitting the vital principle; and the previous weight, oppression, inappetency, &c. gradually vanish.

In this way it is, that the term revulsion ought to be understood, when
 applied

applied to Gout, or other nervous cases. In like manner as when, by any irritating cause, the application of a blister, for example, an extraordinary flux of juices is determined to one particular part of the body, it is the nervous, sentient, vital principle alone, that feels the stimulus, and is called by it to the part irritated, and with it brings the whole tide of inert fluid, that circulates in the vessels, which of itself is incapable of a nifus, propensity, or motion.

The pain and spasm of the Gout, in the membranes and ligaments of the joint, continue, with intense severity, during the space of twenty-four hours, or thereabout; at the end of which period they generally abate, part of the impetus of the commotion, the immediate cause of the spasm and pain, being transferred to the skin, and adipose mem-

brane, where it produces an erysipelatous inflammation. And now the bile, which had been evacuated into the intestinal canal, or stagnated in the adjacent parts, begins to be absorbed, in proportion as the circulation of the moving principle begins to be renewed in the gastric region, and it passes off by the kidneys, and appears in a copious red sediment in the urine. The pain and inflammation accompanying a fit of Gout, seems to owe its existence to the extravasated bile; for when that is all discharged, and the urine is again become clear, pain and every gouty symptom vanish. But whilst there is any remains of the extravasated bile, the erysipelatous swelling about the joint continues, although the spasm and pain of the tendons and ligaments be greatly abated, or even have ceased.

But

But sometimes the extravasated bile not effecting the proper stimulus for the production of a gouty paroxysm, the impetus of the gouty commotion passes suddenly to the face, or some other external part, discharging itself in the form of a genuine erysipelas. And even after a paroxysm of Gout has been fairly fixed upon a joint, in all regularity and form, and has continued there for several days, it is sometimes suddenly superseded by, and transferred to the face, neck, &c. where it appears in the shape of an erysipelas. And this fact gives good reason to apprehend a very great affinity between Gout and erysipelas; and to suppose, that when the pain of the Gout is relieved by the swelling and inflammation of the surrounding integuments, it is owing to a translation of the nervous impetus from the ligaments of the joint, to the skin and adipose membrane, where

where it produces an erysipelatous appearance, suitable to the part affected, and to the bilious nature of the disease. It is not of much importance to the subject, whether the impetus is, in these cases, attracted from the ligaments, in consequence of the previous arrival of some bilious matter at the surface of the skin; or whether it is the change of the impetus to the skin and adipose membrane, that conducts thither the absorbed bile, and occasions the erysipelatous swelling.

As it is a fact, that a painful paroxysm of Gout is often superseded by, and alternates with an unpainful erysipelas, we have reason to suppose that pain is not essential to the Gout, but that it is only the consequence of the sensibility of the part on which the impetus falls. The same cause produces different symptoms, according to the different parts it attacks;

tacks ; hypochondriac, bilious, nervous, icteric, when it fixes on the gastric region ; erysipelatous, when on the surface of the skin ; a regular fit of Gout, when with pain and inflammation, it determines upon some joint of the extremities. Therefore when a regular fit of Gout takes place of, and supplants any or all of these other complaints, there is no better reason to suppose that the former symptoms were owing to an unformed Gout, than for supposing that they were owing to a latent dropfy, when, as frequently happens, they terminate in an ascites, or anasarca, or some other species of that disease.

In like manner, after a man has suffered many years, a variety of distressing symptoms, affecting the mind as well as the body, and which, according to the idea of different physicians, have in turn been deemed nervous, hypochondriac, melancholic, bilious,

bilious, scorbutic, &c. at last a certain portion of acrid bile finding its way into the intestinal canal, in a proper direction to excite spasms in the extremities, and operating with other less obvious causes, fixes the whole nervous agitation in some joint, in the form of a regular fit of Gout, and suddenly relieving the patient of all his former complaints; ought it to be supposed that the former complaints were owing to an unformed; irregular, latent Gout? Surely no—the fit of Gout is no more than a change of impetus, from the internal parts to the extremities. The origin of all is in the irritability of the nervous system, and the irregularities of the moving ethereal principle there: the difference of symptoms is owing to the difference in the sensibility, properties, and uses of the parts affected. But that no doubt may remain concerning the identity of these diseases,

diseases, notwithstanding the diversity of appearances, we will make one remark, though by anticipation, upon the means by which they may all be relieved.

As all the above mentioned chronic complaints originate from the same source, viz. the irregularity and interruption of the ethereal principle in its natural course to the surface of the skin, they are all least troublesome in summer, because in that warm season of the year, the sensible as well as insensible perspiration is more steadily encouraged, and a more perfect circulation promoted: and, under the still greater warmth of a southern sky, especially if within the tropics, the tide of the conducting principle flows with such vigour and constancy towards the circumference, that every hypochondriac, hysteric, and nervous complaint,

complaint, acquired in a northern clime, disappears *. A fit of Gout, like a southern climate, proves a remedy for all these disorders, by directing the tide of the nervous fluid from the internal to the external parts, by which the electric, attractive, and distributing powers of the stomach are restored, and all oppression, stagnation, atony, &c. about the gastric region, with all their train of consequences, are for a time removed.

For the same reason, in some fevers, eruptions prove critical, as by their irritation, a regular, progressive

* It may be asked, since the climate of the tropics proves a remedy for nervous complaints, how is it that bilious disorders are so frequent, and so terrible, in these very regions? The answer is obvious: the tide of perspiration, which, in these countries, is violent, may be turned, with all its rapidity, upon the hepatic and gastric regions, by various imprudencies, and the passions, and intemperance of every kind, must have their operation in every climate.

movement

movement of the conducting principle, towards the surface of the skin, is acquired. In pestilential fevers, critical buboes act in the same way; they become the point to which the nervous impulse tends, and thus restore the electric powers of the animal machine, by giving to the ethereal fluid a regular progressive motion from the center. The eruptions which appear about the mouth and nose, at the close of some anomalous fevers, surfeits, indigestions, &c. terminate the disorder by the same means. In short, they all act as powerful revellents, and efficaciously, because they are applied by the hand of nature.

But nature frequently provides other alternatives for these complaints, similar in their operation and effect, but much less injurious to the constitution, more constant, and more certain than the Gout,
Such

Such is the flux from the hæmorrhoidal veins, or the discharge by a simple gonorrhœa: these also act as revellents, by offering an outlet to nervous ebullition, encouraging the ethereal tide in a regular flow from the stomach to the exterior parts, and affording a succedaneum for that natural passage at the surface of the skin, which, in all cases of irritability, whether gouty, hysterical, or hypochochodriac, is shut up.

When, therefore, the hæmorrhoidal veins, a gonorrhœa simplex, an open ulcer, an occasional erysipelas, a cutaneous eruption, a regular flow of the menses, or the fluor albus, offer a door constantly open, to give immediate vent to every occasional commotion of the nervous fluids, we may readily comprehend why Gout, and every other nervous symptom, which such commotion had formerly produced, is avoided, superseded, or suspended.

suspended. Let it be remembered, that it has already been proved, that neither the quantity nor quality of the visible matter discharged is important in any of these cases.

But when no such conductors, or common shores exist, or having existed, they have been dried up, or stopt, by art or accident, a fit of Gout is often the alternative, and a most miserable alternative it is. The relief it affords becomes every day more imperfect; the intermissions between the fits become shorter; and the intervals are filled up with various painful and distressing complaints, which terminate in, or associate themselves with, other diseases infinitely more terrible, painful, and dangerous, than the Gout itself, or those it superseded. And we learn from the accurate and elegant account of the Gout given by Sydenham, that as bilious, nervous, and gastric com-

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plaints,

plaints, are at first superseded by, and concentrated in a regular paroxysm of Gout, so an original Gout ultimately branches into every distressing gastric complaint.

To the rationale already given of a gouty paroxysm, it may be objected, that it is erroneous, as far as relates to the antecedent disorder in the gastric region, and to the office assigned to the bile ; for that, without any previous warning, or disorder in the stomach or bowels, a person subject to the Gout is often seized with an almost instantaneous paroxysm.

But such fits are seldom attended with the usual pain and inflammation, and therefore do not afford the usual benefit and relief to the constitution. They ought, properly, to be esteemed only a kind of spurious succedaneum to a regular fit of Gout ; the most complete and regular fits
being

being not only attended with a fore-running attack in the gastric region, but the paroxysm is accompanied throughout with unquestionable proofs of great accumulation of bile, such as unextinguishable thirst, which symptom never exists in that degree, unless from bile in the primæ viæ: and the most regular, as well as the most violent fits, happen at those seasons of the year when bilious disorders are most frequent, viz. in autumn. But thirst, fever, and pain, are absent in all such fits of Gout as make their appearance suddenly, and without a previous course of gastric symptoms; and, in general, they are no more than inflations, or puffy swellings of the adipose membrane, to which hypochondriac, hysteric, and other nervous patients, are very subject. It is the previous disorder in the gastric region that generates the bile, and it is the bile that

produces the pain and inflammation, so essential to a complete and regular fit of Gout.

C H A P. XV.

The various modes in which the cure of the Gout has been attempted.

AS the cure of the Gout has been attempted by various, and very opposite means, according to the notion the prescriber entertained of its cause, it may not be improper to mention a few of the most popular, and latest remedies; that by investigating the cause of their ill success, we may be enabled to point out more promising, and less dangerous means of relief.

Portland's powder was introduced into this country under the patronage of the noble family whose name it bears.

bears. Being hot and spicy, it acted efficaciously on the stomach and bowels; it could not, however, abate the constitutional irritability of a gouty fabric; it could not render the body less susceptible of, or liable to nervous agitation; but it prevented the first effects of that agitation from being felt, as it ought to be in a gouty constitution, about the gastric region, and also the usual evacuation of bile, so necessary to direct the impetus to the extremities, and fix the inflammation there. Hence it happened, that the force of the tumult often fell elsewhere, very dangerously, and sometimes fatally; producing a variety of alarming symptoms, according to the nature of the part attacked.

Gum guaiacum, dissolved in cane spirits, or rum, is another celebrated medicine in gouty cases. This gum

possesses the virtue of an alterative; it sometimes opens the pores of the skin, more frequently increases the peristaltic motion of the guts, keeping the bowels gently soluble. In these respects, it has greatly the advantage of the other remedy, and, under a more favourable climate, might be of very considerable use in gouty cases; but in this climate, it is impossible to keep the skin sufficiently pervious to answer the end proposed; and the power of gum guaiacum upon the bowels, as an alterative, is too weak to restore the peristaltic motion, when stopt, or evacuate the bile, when collected, in an incipient paroxysm of Gout. Besides, such medicines are, in their nature, much too hot to be persisted in with safety; for although in pituitous, cold constitutions, the injury may not soon appear, yet the
daily

daily habit of so pungent a dram must, in the end, be attended with disagreeable consequences.

Mercury, a most potent instrument of physic, has been applied to for relief in this disorder, even to the extent of a copious and long continued salivation; but with so very little benefit, that a fit, more severe than usual, has generally succeeded in a few months afterwards. Two ill consequences must ever be the effects of such means; they never fail to weaken the nervous system, and to increase its irritability.

The attempt to procure a free circulation of the nervous ether, and of all the other fluids, by exercising the patient in apartments properly heated by stoves, &c. is a very recent attempt to cure, and is really founded upon a just idea of the nature and origin of the Gout; but unfortunately, the disposition of this climate

must ever combat such a plan, and render it not only unsuccessful, but even dangerous. By such an operation the body is rendered more susceptible of cold, which is one great exciting cause of nervous agitation. By such an experiment, also, the impetus of the gouty commotion, when excited, being diverted from its usual course, may fall on the brain, the lungs, the throat, &c. producing such symptoms as may be expected from an erysipelatous inflammation, added to gouty spasm on these parts.

Some physicians, considering the Gout, rightly, a mere affection of the nervous system, have, upon general principles, recommended the use of the cold bath, to brace, and abate the irritability of the constitution. The rationale of this plan cannot be objected to; but to put it in execution, no small degree of boldness is necessary both in the pre-
scriber

scriber and the patient. For so acute is the irritability in some gouty constitutions, that a single dip in cold water would precipitate them into an immediate paroxysm of Gout.

The plan of curing the disease by a severe regimen, and unalterable perseverance in a milk and vegetable diet, is equally impracticable and dangerous. It is impracticable, because no person, not entirely sequestered from all society, and all the occupations and connections of the world, can persist, with the necessary undeviating accuracy, in either of these diets. And dangerous, because the authors of this plan all agree, that after such a regimen is fairly commenced, the least transgression will be followed by a more alarming fit than any the patient ever before experienced.

In old subjects, such an alteration in diet is totally inadmissible; and, if attempted,

attempted, would certainly be attended with very fatal consequences.

Doctor Cheyney, who was a celebrated practitioner in gouty cases, and certainly had great experience in the disease, seems to consider it, and treat it merely as a bilious complaint. He speaks of the cure of the Gout in the following terms.

“ I have known,” says the doctor,
 “ some eminent physicians, that in
 “ a fit of the Gout itself, at whatever
 “ time it happened, they never scrupled
 “ to drive it off, both from
 “ themselves and others, by strong,
 “ quick, and active purges, which
 “ they repeated every morning whilst
 “ the fit continued; and, at night,
 “ quieted the tumults they excited,
 “ and expelled the gouty humours
 “ introduced into the habit by them,
 “ with cordial and warm medicines,
 “ mixed with opiates. This method
 “ they continued until the pain was
 “ gone,

“ gone, and the tumour subsided ;
 “ and, to prevent its return, and carry
 “ off all remaining goutish humours,
 “ and to strengthen the habit, they
 “ pursued gentle stomach purges, aro-
 “ matic diluters, and warm altera-
 “ tives, till a strong concoction was
 “ obtained. And most certain it is,
 “ that this method will cure any fit
 “ of Gout, how obstinate soever, and
 “ that in a few days. The reasons
 “ they give for this procedure were,
 “ that by this method inflammatory
 “ rheumatisms, of the nature of
 “ which Gout was, erysipelas, schir-
 “ rhous, and even hot tumours, were
 “ safely, quickly, and certainly, with-
 “ out relapse or danger, carried off;
 “ and that the danger arising in
 “ common practice, from purging off
 “ a fit of Gout, was, that care was not
 “ taken to prevent its returning, or
 “ its falling on some other noble
 “ parts, by continuing these gentle,
 “ warm

“ warm purges, diluters, alteratives,
 “ and strengtheners, to carry off en-
 “ tirely the gouty remains, to sweeten
 “ the sharp humours, and to strengthen
 “ the relaxed solids.”

Left there should remain a doubt concerning the quality of the matter purged off, and which must be considered as the fomes of the disease, he classes the Gout with rheumatisms, erysipelas, and hot tumours, which all originate from nervous commotion, and an extravasation and accumulation of hot and acrid bile. It is the bilious matter, which not only directs the nervous impetus to the extremities, in the gouty paroxysm, but also supplies the fuel of the inflammation which accompanies it; and which, like all bilious inflammations, is of the nature of an erysipelas: and when Gout unluckily happens to be misplaced, and to fall in the throat, the lungs, &c. it is
 the

the erysipelatous inflammation of the part that constitutes the chief danger; and the disease, in such cases, ought to be treated exactly as is directed in a genuine erysipelas, with bleedings, and abdominal evacuations.

The method thus recommended, and exemplified by the experienced Dr. Cheyney, for the relief of a paroxysm, serves to explain the true origin, and fomes of the Gout: by evacuating the latter from the first passages, a present, or impending fit, may be prevented, or removed, expeditiously and safely; but it leaves the patient equally liable to a relapse. And indeed, such is the irritating nature of hasty purges, that was it not for the composing quality of the opiate directed to be taken after the operation of each, his plan of purging would stimulate the nerves into fresh tumults, bilious accumulations, and

and a renovation of every symptom it was intended to relieve.

The propriety of administering opiates in the Gout, has been a question much agitated amongst practitioners. In my opinion, the question is easily answered. If bile is the fomes of the disease, the proper evacuation of it is all that is necessary, to remove or prevent a paroxysm. Before that business is performed, opiates must be improper; and if the bile has been properly evacuated, opiates are unnecessary. They may sometimes be used with success in allaying nervous commotions, which, if not immediately composed, might induce a paroxysm of Gout; but then they must be used before the commotion has effected any discharge or collection of bile in the gastric region.

C H A P. XVI.

*A certain and effectual method proposed
for preventing or carrying off every
gouty attack.*

IN attempting the cure of Gout, two objects must ever be held in view; viz. first, to discover the means by which an impending, or incipient paroxysm, may be with safety and certainty averted. Secondly, to rescue the patient from the danger of a relapse, or of a metastasis of the disease.

From the account, or rationale already given of a gouty paroxysm, it will appear, that to avert, or to remove an attack, all that is necessary is, to continue the regular flow of the nervous fluid through the animal machine, or to restore it when interrupted or perverted. I shall first
speak

ſpeak of the mode of reſtoring a regular flow of the ethereal principle, when interrupted, or perverted.

As in all gouty attacks, the firſt effects of the commotion are felt about the ſtomach and inteſtines, in conſidering of a remedy, the attention is naturally led to that quarter. The guts are certainly the natural common ſewer of the body, and by that channel it will be found eaſieſt to diſcharge the impetus of the excited gouty ebullition, together with the extravafated and ſtagnated bile, and other impurities, produced by the firſt ſymptoms of the commotion, in the gaſtric region. The commotion muſt have a vent, and if the impetus is not conducted out of the body, it will fall on ſome part of it, either in the form of regular, or miſplaced and irregular Gout; and the bowels being the part where the firſt ſymptoms are felt, nature ſeems to point

point to them as the proper outlet of a gouty ebullition, from whence she herself very frequently discharges it in a safe and easy diarrhœa. It must be always remembered, that the irregularity in the motion of the nervous spirit, occasioned by the exciting stimulus, is not confined to the intestines only; for, at the same time that the peristaltic motion is stopt, the perspiration on the surface of the skin ceases; so that this elastic spirit being in a manner imprisoned in the body, whichever emunctory is first properly opened, the whole tide and torrent of the ebullition will by that road effect an escape; by which means the progressive motion of the vital principle will be renewed at the stomach, the capillary tubes will again expand, their contents will complete their circuit, and all the offices of the animal machine will

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be performed with their usual vigour. But the difficulty is, to discover the means, which, by operating effectually on the nervous system, may be capable of reconducting the tide of animal spirits in its proper channel, through the intestinal canal. A common purge is not fit for this purpose; and, with all due respect to Dr. Cheney, such harsh medicines as he proposes are more likely to protract or renew a paroxysm, than to remove it, and that for the reasons already given. But although no common, nor indeed any purge, nor any thing stimulative, is proper for this purpose, yet the first and immediate consequence of opening a free passage for the stagnant ether through the guts, will frequently be a sudden and repeated discharge of bilious stools, when bile has been previously accumulated in considerable quantity in these parts.

And

And, as long as any bilious colluvies remains in the bowels, so long will the discharge of loose, dark coloured, griping stools, continue. Sometimes, by the use of the same means, the impetus takes a turn to the kidneys, and then the bilious matter passes off in a thick urine.

If the patient does not neglect the usual previous warnings in the gastric region, the paroxysm may always be, in the above mentioned way, safely prevented, with little trouble to the patient, and even without consciousness of the operation, when it passes off by the kidneys only.

In like manner, in the chronic and irregular Gout, and in some bilious and hypochondriac cases, as an interrupted, or inverted motion of the ethereal fluid, is the cause, so the composing of all nervous agitations, and the renovation of the natural circuit of the nervous spirit through the intestinal

canal, is followed by a discharge of the redundant and stagnating bile ; and a loose stool or two, or urine loaded with bile, continue daily to be discharged, until every symptom vanishes, and the skin becomes soft, the complexion clear, the sleep refreshing, the appetite is restored, and the whole body enjoys a sense of vigour and alacrity. But gouty cases of a very irregular nature, and which have occasionally imitated every nervous symptom, without any particular criterion of Gout, except, perhaps, the appearance of chalky urine, are frequently carried off without any visible evacuation, either from the kidneys or guts, merely by the allaying of the nervous commotions, and the irregularity of the nervous system.

C H A P.

C H A P. XVII.

Of a gouty regimen.

THE next thing to be considered is, how a relapse may best be guarded against: and to guard effectually against relapses is, in some cases absolutely impossible, in all very difficult. For example, when there is an inherited irritability, so acute as not to endure, with impunity, the common vicissitudes of the weather, or the commotion occasioned in the nervous fluid by the revolution of the seasons; and which has, perhaps, excited regular paroxysms of Gout at the earliest period of life, in some even before the age of puberty. In such cases, the nervous system must remain, as nature framed it, ever liable to the consequences of a diseased sensibility, coeval with the ori-

ginal mechanism of the fabric. Care and attention, however, may avoid many circumstances which are stimulative of a paroxysm; but of all others, an emigration to a southern climate would be the most effectual preservative; to a climate where the equality of the seasons hardly admits of the distinction of spring and autumn, and where the constant, or almost constant serenity of the sky, precludes all apprehension from the vicissitude of weather. But when any person unfortunately inherits a constitution of such irritability, as no care can defend against the effects of the seasons, and of the weather, whilst in this climate, and who cannot remove to another, his chief trust must be in such medical means as will, at the commencement of the paroxysm, open a passage for the whole impetus of the Gout to take its course out of the body, together
with

with all the colluvies arthritica, or bilious matter, that may be collected.

When, on the other hand, the irritability of the nervous system is not the work of nature, but of intemperance; and when the causes already enumerated as predisposing to Gout, have been the sole means of reducing the nerves to a state of diseased sensibility; in such cases, careful attention to regimen, and to the government of the passions, may do great things towards restoring the body to the degree of healthful firmness it originally possessed.

Although a gouty patient may be considered as irritable at all points, yet each man seems to be more vulnerable in one part than in all the the rest. In some, it is chiefly an error in diet that induces a paroxysm; in others, the inclemency of the weather, change of seasons, and such external circumstances, are the most

efficacious stimuli; and in a third the mind is the seat of irritation. The patient's own observation, assisted by the sagacity of his physician, will readily point to that part which is weakest.

In regard to diet, only general directions can be given, which must be varied and accommodated to particular circumstances and constitutions. The diet must ever be proportioned to the peculiarities of the digestive powers. Was I to recommend in general, to all gouty patients a vegetable and milk-diet, together with a beverage of water, or small beer only, what would its effects be in a stomach, habituated to animal food, and a generous glass of wine? Undoubtedly the stomach would become too cold for the office of digestion; it would be filled with flatulencies, and in danger of becoming the seat of the next paroxysm of Gout, which so debilitating

bilitating a change of diet would speedily excite. In some constitutions wine produces an unfriendly, irritating stimulus upon the nerves; in some, moderately used, wine is a necessary cordial. A very little attention will discover whether it is inimical, or, if it is, whether only so when used to a certain point; for in aged constitutions, especially such as are worn down by the disease, or by intemperance, what dangerous consequences might not be expected to follow the sudden adoption of a cold and flatulent diet? for it must be ever held in mind, that whatever debilitates the body, renders the nervous system more liable to be stimulated into commotion by the change of the seasons, the vicissitudes of the weather, the fluctuations of the human mind, and by all other irritating causes external, or internal.

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That particular diet, used with moderation and temperance, which produces, after every meal, a general glow through all the abdominal viscera, together with a serene hilarity of mind, is certainly the best. On the contrary, if there is flatulence, oppression, and a disagreeable fullness in the stomach after eating, added to a disposition of mind which, without any apparent cause, is easily hurried, fretted, or plagued with a sense of impatience; the diet that produces such painful effects is certainly ill-suited to the constitution of the patient; and changes ought to be made until one more favourable is discovered.

CHAP.

C H A P. XVIII.

A more minute description of a regimen proper for gouty patients.

IT must be understood that, previous to the commencement of a regimen, I take it for granted that every medical step has been taken to remove all stimulating bilious matter from about the region of the stomach, which, when permitted to remain, is an endless source of indigestions, and mental distress.

To descend to a more particular description of suitable diet; simplicity, in every respect, must be accurately adhered to. It ought to be the subject of constant attention, to create no stimulus of any kind in the stomach; all must be mild, smooth and grateful to the nerves there. One rule is universal, and ought to be invariable, which

which is to eat of one thing only at one meal; and if that one thing is meat, let it not be over done, let the juices be entire in it, it will more easily digest, and be more nourishing. So religiously should this rule of eating only of one thing at one meal be adhered to, that I would not add even a bit of cheese; all art in dressing food, except plain roasting, boiling, or broiling, ought to be excluded; and all sauce, except the juice of the meat.

If the constitution requires an alteration of diet, let there be days appropriated for puddings, made without fat, or fruit; for soups, or rather broths, and for such vegetables as are mildest and least flatulent. Upon these meagre days, malt liquors of all kinds are improper; instead of which the drink may be water mixed with white wine, or water alone, taking the wine after it; or a little brandy
and

and water, where that is more palatable, but without sugar. Upon meat-days, small beer will be sufficient. Another suitable form of diet for many constitutions will be meat for dinner, dressed as already mentioned; and milk, or water gruel with milk, made hot, for breakfast and supper. By these simple modes of eating, the stomach will more easily perfect its work, and the patient will also be at no loss to distinguish which is most agreeable to his constitution, of all the different articles of food thus separately taken on different days.

Another regulation ought carefully to be attended to, and that is, to avoid all sippings of every kind between meals; this is more particularly necessary after the digestion of a meal is fairly begun. How often does it happen that a few cups of tea, or coffee, taken after a hearty dinner, and after drinking wine, convert the
whole

whole contents of the stomach, at least all the liquids of the stomach, into a state of acidity; and how often, how general the complaint, that tea and coffee in the afternoon prevent sound sleep at night; which is imputed to the specific effect that these liquors have upon the nerves: whereas the fact most probably is, that by interrupting digestion, they occasion a kind of crudity to take place in the stomach, which continuing all night, irritates the nerves, so as to prevent sleep.

A supper is a very unhealthful meal, particularly in this country, where we dine so late, and eat so heartily at dinner; and probably the chief reason why it is so unhealthful, and occasions such uneasy sensations, and so disturbs rest, and oppresses the stomach, is, that it interrupts the digestion of the dinner, being taken before that is finished, and by that interruption,

terruption, the contents of the stomach become crude, and the supper, with the reliquiæ of the dinner remain the whole night in a state of indigestion, and consequently irritating and stimulating the nervous system in a very unfriendly manner.

As the great source of a stimulus from the stomach is an imperfect digestion, care ought to be taken, never to be put into it more than it can expeditiously digest. To rise from table with some degree of appetite is both conformable to the rules of physic; and to the principles of gratification; to preserve the unabated possession of all the senses, is in this case, a most rational piece of luxury, a commendable refinement.

Fish is among the articles of food seldom to be ventured upon; besides the natural unhealthfulness of that diet, the necessity of eating with it a quantity of butter and other improper things

things by way of sauce, ought to exclude it from the eatables of a gouty person.—In the most healthful and vigorous constitutions, some powerful assistance is often necessary to enable the stomach to digest fish. Hence the common proverb, that fish should swim in the stomach in wine, as it did before in water; and hence the very general custom of using liqueurs and other cordials immediately after eating it.

In regard to the article of drink, great care ought first of all to be taken, not to exceed in quantity; too much weak liquids are capable of doing as much mischief as too much strong, when frequently and habitually used; they impare the electric powers of the stomach. One half pint of any mild weak liquid is sufficient at one meal; a sense of thirst after dinner, in the afternoon, will inform you when more is necessary;
more

more liquid is necessary to a meal of animal food, than one of soup, pudding, or vegetables. The quality of the liquid ought to be mild, simple, uncompounded, and not liable to fermentation in the stomach; and, in general, for every constitution subject to nervous disorders, all mixture of liquors in the stomach is improper, and particularly small beer should never be drank at the same meal with wine; and whoever is obliged to drink more wine than is agreeable, will find by experience, that one draught of small beer, or other fermentable beverage, will double the effect of all the wine in the stomach; and that, on the contrary, water opposes the intoxicating quality of wine: in the same manner, intermediate glasses of Champaign hastens the period of intoxication, when even a glass of brandy would, in some cases, retard it, in as much, as the first promotes fermentation in the stomach,

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and

and the other checks and prevents it ; the one diminishes, and the other increases, the electric and digestive powers of the stomach. Likewise the habitual use of cyder, or stale beer, or any sharp liquor, has been found to act powerfully on the irritability of the nervous system, and, in that respect, to be greatly productive of Gout.

Another copious source of nervous agitation, is the mind ; and of all the painful consequences that attend an acute irritability of the nervous system, none are more intolerable than those that affect the mind. The mind is the seat of pleasure and of pain ; and whatever independent qualities the soul may possess, whilst it is connected with the body, it seems to feel nothing but through a corporeal medium. In many instances, the mind acts merely as a reflector of the state and temperament of the corporeal medium. And, on the other hand,
the

mind, in certain situations, reverberates, with double energy, all its own painful sensations upon the nervous system. When, therefore, I am told of any person remarkable for a peevish, querulous, fretful temper, I suppose that the fault may be in some unfortunate circumstance of the formation or structure of the nerves. And when a lady prematurely loses her complexion, is troubled with bilious complaints, &c. the cause will frequently be found in a too great sensibility of mind, which may also have had too frequent cause for agitation. And by proper attention and enquiries, a physician will readily inform himself, whether the nervous system, and of course the mind, has been endowed originally with too great a degree of sensibility; or whether the nervous system, originally firm and good, has, by painful and frequent agitations of the mind, by irregularity in hours, in

diet, the want of proper exercise, &c. been shaken, and reduced to a state of diseased sensibility, productive of gouty, stomachic, icteric, and bilious complaints and appearances. In short, whether the irritations have passed from the mind to the nervous system, or from thence to the mind, in either case the corporeal consequences are the same : but the misfortune is, that all these disorders acquire vigour by every new symptom they produce. The nerves are first weakened and disordered ; their disorder produces bilious, stomachic complaints, &c. and the extravasated, acrimonious bile, exasperates all the circumstances that produced it, occasioning a constant irritation of the nerves, and through them, of the mind, together with inappetency, indigestion, relaxation, feverishness, and all the endless variety of symptoms that may spring from such a copious source : all which
 symptoms,

symptoms, from the apparent yellow tinge of the skin, together with the frequent discharge of bile, are stamped with the general appellation of bilious.—But instead of the symptoms and diseases just enumerated, in a constitution where a gouty bias is prevalent, such an irritability of the nervous system, and such a chain of causes, would have produced a paroxysm of Gout; and as the agitations of the mind, when continued, weaken, in a particular manner, the powers of the stomach, that viscus would most likely, in such a case, have been the part to which the gouty paroxysm would at first have pointed its attack.

The list of occasional accidents furnish another source for the immediate causes of Gout, which, however, are often little suspected to be the authors of the next paroxysm that makes its

appearance. When a man gets a severe fall, or any other sudden and violent bodily shock, he cannot conceive that the fit of Gout which succeeds soon, or immediately after, has that accident alone for its cause. Indeed if his foot has slipped, or if he has strained his ankle, or given a sudden wrench to the bones of the foot, and that accident is succeeded by a gouty paroxysm in the same joint, the case, in his opinion, admits of no doubt; the strain, or wrench, has drawn the gouty humour to that part: whereas the fact is, that, as before the accident, there existed no gouty humour, so the pain and concussion received by the accident, excited a general commotion of the nervous spirit; which commotion usually terminates, in a gouty patient, in a paroxysm of Gout; and in an hysterical female, the same accident would have excited
a com-

a commotion which would have terminated in a violent paroxysm of hysterics.

C H A P. XIX.

The term Bracing, generally understood;—what it really is.

HAVING thus pointed out the principal sources whence the causes stimulative of Gout most commonly originate, it will not, I apprehend, be necessary to add any arguments to persuade gouty, bilious, hypochondriac, or hysterical patients, carefully to avoid them. In some instances, however, as in early and hereditary Gouts, when the irritability is so great, that the most common events of life are sufficient to interrupt the regular flow of the nervous fluid, what caution can aught avail? But

even in such cases, which are really deplorable, as well as in every other disorder of nervous origin, something may, and ought to be done, to give more firmness to the constitution. Great care ought to be taken, to avoid whatever is known to weaken, or, in the common phrase, to relax; for whatever does either, diminishes the electric powers of the body, increases the irritability of the nerves, and heightens the gouty propensity; such as too cold and low a regimen; the too liberal use of tea; adopting water for the only beverage, when the patient is neither young nor vigorous; a sedentary life; gloomy ideas, &c. Instead of which, I would recommend whatever exhilarates, and warms, and strengthens, without irritation; such as exercise, bitters, steel, the bark, &c. whatever corrects and removes acrimony in the stomach and primæ viæ, or allures the circulation to the surface

surface of the skin, as warm bathing, friction, a southern, dry, serene, warm atmosphere; these will restore, in some measure, the electric powers, and give to the nervous fluid a more firm and vigorous motion, so that it will be less liable to be disturbed by the minute stimuli that have been mentioned. The above directions are also applicable, with very little variation, in all nervous cases, whether the agitations direct their impetus to one part of the body or another; whether they produce stomachic, bilious, eruptive, hypochondriac, hysterical, or gouty symptoms, not only the regimen, but the medicinal course, ought to be nearly the same in all these seemingly very different disorders; of all which, and of all chronic diseases, without any exception, the easiest, in my opinion, to be relieved and remedied, is the Gout, whether it be of an acute or chronic, regular or irregular kind.

Before

Before I finish this part of the subject, it may not be amiss to remark upon the very improper idea commonly applied to the means and operation of bracing. It is not always that an austere astringent will brace, or that a cooling diluent will relax; the very reverse is true in a multitude of instances: the end of bracing, is to increase, to a certain point, the electric principle of the animal machine, and to induce a free and easy circulation of that, as well as of all the grosser fluids.

When a course of high living, repeated intemperance, and indigestion, has heated, fouled, and loaded the gastric region with impurities; a cool diet, temperance, and gentle purgatives, will prove the most efficacious bracers.—When the patient labours under a constitutional debility in the gastric and abdominal regions, which has induced bilious evacuations, obstructions,

obstructions, and a train of distressing
 hypochondriac symptoms, the bracer,
 in that instance, is whatever is capable
 of discharging the bile, removing the
 obstructions, and restoring to the sto-
 mach its pristine powers of vigorous
 digestion. When the mind is oppress-
 ed with anxiety, wounded with disap-
 pointment, or torn with despair, the
 bracer is not to be found in medicine,
 nor in regimen; these can only ope-
 rate upon the body, where the cause
 does not exist. When the circulation
 languishes, and almost stagnates, un-
 der the influence of a spiritless, unela-
 stic atmosphere, in which the ethereal
 fluid seems scarcely to exist, the im-
 mediate and only bracer, is a south
 wind and a serene sky. It may also
 be of use to remark upon the bracing
 effect which exercise has in the body,
 that friction and exercise are so simi-
 lar in their nature, that their effects
 must be admitted to be the same.

Now

Now we know for certain, that it is the property of friction to increase the proportion of the electric fluid, natural to all living or dead bodies, and we may therefore conclude, that exercise braces and performs all its other good offices in the body, by increasing in it the quantity, and directing the action of the electric principle.

C H A P. XX.

The event of the Gout, when left to itself.

THE ill success that has attended every endeavour to remedy, or even to mitigate the severity of the Gout, under the management of the faculty, together with the impositions and frauds of ignorant pretenders and empirics, have at last brought the
minds

minds of people into so obstinate a scepticism respecting the prudence and efficacy of medical assistance in such cases, that the task seems less difficult to relieve or remedy the Gout, than to remove the prejudice against the attempt. The general cry is, that if the Gout could be removed, there would arise in the body some other more dangerous disorder, such as dropfy, consumption, palsy, &c. but if our reasoning on the nature of the Gout obtains any credit, our method of cure will not be found liable to objections of that sort.

When nature supersedes the Gout, by a discharge from the hæmorrhoidal veins, or from the surface of an open ulcer, or suspends its approach, by the periodical evacuation of the menses, she acts in a manner similar to the mode here recommended; as fast as any ebullition arises in the nervous system, it passes off by these outlets.

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In like manner, by adopting our plan, as soon as the first sensation of Gout is felt in the constitution, the ebullition may be let off, if the expression is admissible, by the open channel of the intestines, or by the kidneys. It may be done even before any considerable quantity of bilious matter can be collected. But when the bilious accumulation is actually formed about the gastric and hepatic regions, and the paroxysm advances in form, without any attempt to relieve, or mitigate its severity, the principal distress afterwards arises from the difficulty of passing the immense quantity of stagnating, acrimonious bile, by the narrow emunctory of the kidneys, the only channel which nature seems in general disposed to use for that purpose. Comparing the quantity and quality of the matter to be discharged, with the narrow tube through which it must pass, we may easily suppose
that

that the process must be slow, and consequently that the stomach and intestines must continue oppressed with a load of acrimonious matter during the course of the longest fit, which never can fairly terminate whilst any bile remains extravasated, or stagnating improperly, in the hepatic or gastric regions. Hence it happens, that men whose primæ viæ have been much weakened by the Gout, have always more or less bile stagnating about these parts, and are never fairly clear of gouty feelings and symptoms. And every fit abating somewhat of the digestive and electric powers of the stomach and intestines, great obstructions are gradually formed in the liver, and in the neighbouring glands; and frequent attacks of jaundice, and other bilious complaints, together with atony, sickness, and every symptom of restless and peevish anxiety, harass the patient,

tient, and exhaust the temper of the attendants with fruitless assiduity.

But these are not all the ill consequences that arise from the slow, confined, and imperfect evacuation of the bile, during the gouty paroxysm, by the narrow and inadequate channel of the urinary glands ; for, from the minuteness of that emunctory, compared to the quantity and consistence of the acrimonious matter to be passed off, and from the recumbent posture of the patient in bed, which occasions a constant pressure on the kidneys and ureters, and which are also greatly heated by the feverish condition of the body, is frequently generated a disease more terrible than the Gout itself, and that is the stone. It is very much the disposition of bile to form calculous concretions ; and the stone in the gall-bladder seems to be no otherwise different from the stone in the kidneys,

or

or urinary bladder, than that the bile in the latter situation being diluted in water, the earthy particles approach nearer to each other, and are united more closely, and consequently form a more firm and solid stone, in the urinary bladder than in the gall bladder.

Now, had an auxiliary vent been early opened for the bilious matter to pass speedily off, for example, by the intestinal canal; all these calamitous maladies might, and undoubtedly would have been evaded, as the whole collection might have been with great ease evacuated, and the fit been terminated, in a few days; for the fit ends the moment all bilious matter in the gastric region is evacuated. The means, or remedy, by which this artificial drain is to be opened, must act as an anodyne, an antispasmodic as well as aperient; for all purgatives, being stimulants, tend to ex-

cite and renew arthritic symptoms, and are therefore unfit for this office.

When the Gout is unopposed, and when, without any attempt being made to remedy it, either by medicine or regimen, it is left entirely to itself, after tormenting the unhappy patient with every mode and species of pain, and inconceivable wretchedness, it finishes its tyranny, in the manner most pathetically described and lamented by Sydenham, who himself long endured the attacks of that cruel disease, and to which at last he fell a martyr. His words, translated by Swan, are as follow.

“ But besides the above mentioned
 “ symptoms, viz. the pain, lameness,
 “ inability to motion of the parts af-
 “ fected, the sickness, and other cir-
 “ cumstances above enumerated, the
 “ Gout breeds the stone in the kid-
 “ neys in many subjects, either be-
 “ cause the patient is obliged to lie
 “ long

“ long on his back, or because the
 “ secretory organs have ceased per-
 “ forming their proper functions, or
 “ else because the stone is formed
 “ from a part of the same morbidic
 “ matter; which, however, I do not
 “ pretend to determine. But, from
 “ what cause soever this disease pro-
 “ ceeds, the patient is sometimes at a
 “ loss to know whether the stone or
 “ the Gout be most severe; and some-
 “ times a suppression of urine, caused
 “ by the stone’s sticking in the urinary
 “ passage, destroys him without wait-
 “ ing for the slow advances of its
 “ concomitant the Gout. The pa-
 “ tient is not only reduced to this
 “ helpless condition, but, to complete
 “ his misery, his mind, during the
 “ fit, sympathizes with his body, so
 “ that it is not easy to determine
 “ which of the two is most afflicted;
 “ for every paroxysm may be as justly

“ denominated a fit of anger as a fit
 “ of Gout, the rational faculties be-
 “ ing so enervated by the weakness of
 “ the body, as to be disordered upon
 “ every trifling occasion ; whence the
 “ patient becomes as troublesome to
 “ others as he is to himself. More-
 “ over, he is equally subject to the
 “ rest of the passions, as fear, anxiety,
 “ and the like, which also torment
 “ him till the declension of the dis-
 “ ease, when the mind is restored to
 “ health along with the body, hav-
 “ ing recovered its former tranqui-
 “ lity. To conclude : the viscera, in
 “ time, are so much injured, from
 “ the stagnation of the morbid mat-
 “ ter therein, that the organs of secre-
 “ tion no longer perform their func-
 “ tions ; whence the blood, over-
 “ charged with vitiated humours,
 “ stagnates, and the gouty matter
 “ ceases to be thrown upon the ex-
 “ tremities, as formerly, so that at
 “ length

“length death frees him from the
“mifery.”

Thus does the venerable Sydenham, with his usual sagacity, afcribe the formation of the ftone to the morbidic matter of the Gout, which he fupposes may have a propenfity to produce calculous concretions. He alfo imputes the diforders, gradually brought on the abdominal viscera of gouty perfons, to the fame morbidic matter ftagnated or obftructed there; and thefe are precifely the ideas that we have here adopted. And nothing is more certain, than that both thefe diforders are produced by the fame caufe; but that caufe is, as we have already attempted to prove, not an imaginary morbidic matter, but real thick, acrimonious, extravafated bile: and the ill effects arifing from the accumulation and ftagnation of bilious matter about the viscera, are fo obvious, that a particular description of

them seems unnecessary. The acrimony of the juice will keep up a constant stimulus, together with a constant, though imperfect paroxysm of Gout, the impetus of which must revert chiefly upon the stomach and gastric region, that being the most debilitated part. And the constant redundancy of bile will excite a continued feverishness, with thirst, nausea, indigestion, and atony, which very hot cordials considerably alleviate; and therefore, in these circumstances, every patient acquires an instinctive appetite for strong spirituous liquors: but nothing can prove a remedy, in such cases, that is not capable of composing the irregularities of the nerves, opening the obstructions, and, whilst it restores the peristaltic motion of the guts, evacuates the stagnating juices: and this must also be performed without exciting any irritation, else the remedy will prove worse than the disease.

And

And fortunately this, in almost every case, may be done with ease and safety; and therefore, although it is not in the power of art to change a hereditary irritability into a firm system of nerves, nor by regimen, exercise, &c. to render such a constitution unaffected by those causes that are stimulative of gouty paroxysms; yet these paroxysms, when threatening, begun, or even fairly fixed, may be safely carried out of the body by the channel of the intestines, or by the kidneys, or alternately by each, according to the stage of the fit, and the situation of the gouty or bilious colluvies in the bowels. By such a process, the only existing, real gouty matter, is evacuated and expelled out of the constitution, in the same way that nature takes, only more expeditiously, without confinement, fever, or pain, which are the great sources of the debility,

lity, disease, and accumulated distress, which a succession of tedious and painful paroxysms ultimately bring upon the miserable patient. For the chief calamities of Gout are brought upon the body by the long continuance of the acrimonious, bilious colluvies, in the gastric region, and intestinal canal, by which a fever is excited and kept up, until all that matter is passed off by the narrow and inadequate channel of the kidneys; which is a process of some weeks, during all which time the gastric region is loaded and overwhelmed, and in every fit some new obstruction is formed, or some old one confirmed in the liver, pancreatic glands, &c. till at last there is no longer any distinction of paroxysms, but there exists an almost continual feverishness, with pains in various joints, and other parts of the body, together with sickness, anxiety,

anxiety, inappetency, jaundice, dropfy, stone, and every species of distress, the last and least of which is death.

When the Gout does not arise from a constitutional cause, but has been induced by a series of intemperance, mental agitations, and other calamities; and when, in the manner here proposed, the paroxysms are discharged out of the body, almost as suddenly as they arise, instead of being permitted to torture slowly, and ravage in the constitution for weeks, destroying every remaining principle of strength and firmness, regimen, of which exercise is a most material and important part, may, under such circumstances, restore the nervous system to that point of sanity, from which excess and violence had driven it.

But what can be expected from regimen during the short intervals of Gout, when the very next paroxysm is suffered to exert so much of its destructive

destructive influence, and for so long a time, that every succeeding fit leaves the body in a more diseased condition than the former did : so that by every fit the number and severity of the morbid symptoms are increased. On the other hand, when, instead of being confined, at different times, three or four months in the course of the year, the patient, by a proper medical course, permits the usual attacks to be evacuated in the manner just mentioned, thus escaping pain, fever, or confinement ; regimen, change of air, exercise during the intervals, &c. may then have its full efficacy, in securing the body against the propensity to a relapse ; whilst all the dreadful train of symptoms, arising from tedious and frequent paroxysms, will be avoided.

ADDENDA.

A D D E N D A.

Phlogiston, p. 28.

I AM not ignorant that some ingenious chemists are of opinion, that phlogiston is an elementary principle, entirely distinct from the ethereal or electric fluid ; but as phlogiston is allowed on all hands to be the inflammable principle in matter, I cannot conceive it to be different from fire, however modified, as nothing but fire can exhibit flame : flame is the principle of fire discharging itself, and in the act of separating in its naked form from the matter with which it had been compounded and combined.

Nervous fluid, p. 29.

WHEN I say that the ethereal spirit is the nervous fluid, and the moving principle in the nervous system, I do not understand that in these capacities it exists and acts in the naked state which renders it visible in operations
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of electricity. It is capable of infinite combination, modification, and diversity, without losing those specific properties which are necessary for the performance of the offices here assigned to it, in the animal œconomy. And the reader will not withhold his assent one moment to the probability of this opinion, when he recollects, that, according to the philosophy of all ages, the whole exhibition of nature through the extent of creation, every form, mode, quality, and appearance, animate and inanimate, originate and are formed of no more than four or five, perhaps no more than three elementary principles, of which the electric spirit is probably the chief.

Loebia, p. 56, and 66.

THE painful and weakening circumstances preceding, accompanying, and consequent to delivery, fail
not

not to reduce the nervous system of puerperal women to a state of great irritability, the commotions of which are vented along with the lochia, after delivery. When no unnatural check happens to the lochia, they gradually diminish, as the impelling cause, the impetus of the nervous commotions, abates, and instead of red blood, the discharge becomes pale; thin, watery, colourless, and vanishes; and this is the proper, natural, and healthful process. But when, by some unlucky accident, the discharge suddenly stops whilst its colour is yet a strong red, then it is prematurely stopt, however long it had before continued, and the elastic nervous fluid, which should have been vented at the uterus, reverts, and produces various nervous symptoms, puerperal fevers, deliria, mania, &c. sometimes Gout, and sometimes an extraordinary discharge of blood from some other parts of the body, as in the case above related;

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In my own opinion, it is neither the continuation, nor quantity of lochia, but the gradual declension and change of colour, that is to be depended upon in the puerperal discharges, as the true criteria of sufficiency.

Milk diet, p. 141.

THE point aimed at, and sometimes obtained by a milk and whey diet, is the quieting all irritation, and sheathing acrimony in the stomach, which, as has been observed, is the part of the animal machine whence the nervous system chiefly derives agreeable or disagreeable sensations, and the nervous fluid acquires a regular firm motion towards all the distant parts of the body, or is stimulated into irregularity and commotion. And in consumptive cases, originating from nervous commotion, and where the tide of the nervous fluid, having been disturbed and driven from its natural course, has unfortunately been turned
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on the lungs, into which, and the juices circulating in them, it empties itself, creating a constant stimulus and inflammation in the first, and siziness in the latter, milk and whey are an excellent regimen, and, for the most part, the only remedies from which any good can be hoped in consumptive cases, whilst the patient remains in this country; for, next to the recalling the impetus of the nervous irregularities from the vital parts, to compose and to supercede all nervous commotion is the most desirable object to be obtained. A vegetable diet, so constantly and so inefficaciously applied to in consumptive cases, seems calculated to increase nervous irritability, and the symptoms it was intended to remove, by weakening the bowels, and exciting flatulency in them; for whatever disturbs the bowels, disturbs the nervous fluid. If, indeed, by a long continuance of vegetable, flatulent, debilitating diet, the stomach should

should at last be so much weakened, as to be the center to which every commotion directs its course, then a metastasis might ensue from the lungs to the weaker viscus, and a set of hypochondriac or bilious symptoms might supersede the consumptive ones. Balsamics, that is, warm balsams and gummous medicines, sometimes are serviceable in consumptions: when they succeed, it is in phlegmatic, languid, cold constitutions; by warming the stomach, they communicate greater firmness and regularity to the ethereal tide, they direct it to the surface of the skin, its natural channel, and by that means free the lungs from the attack.

From the foregoing observations, the manner in which a whey regimen proves an effectual remedy in erysipelas, acute rheumatisms, and other diseases of the nervous and bilious class, may easily be comprehended.

F I N I S.

